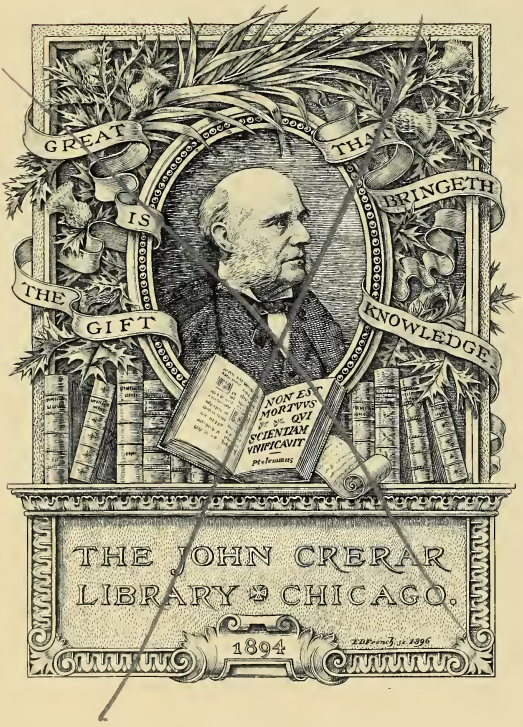

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VOLUME X NUMBER 2

The George Washington University Bulletin

CATALOGUE NUMBER

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Entered October 6th, 1904, at Washington, D. C., as second-class matter under Act of Congress of July 16th, 1894

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The George Washington University Bulletin

JUNE, 1911

CATALOGUE NUMBER

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GENERAL AND HISTORICAL

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UNIVERSITY CALENDAR.

1911.

June 7, *Wednesday.*—University Commencement.

SUMMER VACATION.

September 27, *Wednesday.*—Academic Year begins in all Departments of the University.

October 11, *Wednesday.*—Stated meeting of the Board of Trustees.

October 20, *Friday.*—Last day for registration for the first term without late-registration fee.

November 23–25, *Thursday* to *Saturday,* both inclusive.—Thanksgiving recess.

RECESS FROM DECEMBER 23, 1911, TO JANUARY 2, 1912, BOTH INCLUSIVE.

1912.

January 29, *Monday.*—Last day on which dissertations may be presented.

January 10, *Wednesday.*—Stated meeting of the Board of Trustees.

February 12, *Monday.*—Doctorate Disputation.

February 1, *Thursday.*—Second Term begins.

February 20, *Tuesday.*—Last day for registration for the second term without late-registration fee.

April 5–8, *Friday* to *Monday,* both inclusive.—Easter holidays.

April 9, *Tuesday.*—Davis Prize Speaking.

May 1, *Wednesday.*—Last day on which dissertations may be presented.

May 20, *Monday.*—Doctorate Disputation.

May 21–24, *Tuesday* to *Friday.*—Examinations for admission.

May 29, *Wednesday.*—Annual meeting of the Board of Trustees.

May 30, *Thursday.*—A holiday in all departments of the University.

June 2, *Sunday.*—Baccalaureate Sermon.

June 5, *Wednesday.*—University Commencement.

THE LEGAL HISTORY OF THE CORPORATION.

The George Washington University is the successor of "the Columbian College in the District of Columbia," which was chartered by Act of Congress in 1821. The name and title of the Columbian College were in 1873 changed by an Act of Congress, under the terms of which the College was given the name of "the Columbian University." The Columbian University was by Act of Congress in 1904 authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education. The Board of Trustees elected to take the name of "the George Washington University," and the name was approved by the Government officials, as required by the statute; the change of name going into effect September 1, 1904. All the Acts of Congress now in force relative to the Columbian College and the Columbian University are therefore parts of the charter of the George Washington University.

The original charter of the Columbian College was as follows:

An Act to incorporate the Columbian College, in the District of Columbia.

Be it enacted, &c., That there be erected, and hereby is erected and established, in the District of Columbia, a College, for the sole and exclusive purpose of educating youth in the English, learned, and foreign languages, the liberal arts, sciences, and literature; the style and title of which shall be, and hereby is declared to be, "The Columbian College in the District of Columbia."

SEC. 2. *And be it further enacted,* That the said College shall be under the management, direction, and government of a number of Trustees, not exceeding thirty-one, to be elected triennially, by the contributors to the said College, qualified to vote, in such manner, and under such limitations and restrictions, as may be provided by the ordinances of the College, on the first Monday in May; and that the first Trustees of the said College shall consist of the following persons, viz: Obadiah B. Brown, Luther Rice, Enoch Reynolds, Josiah Meigs, Spencer H. Cone, Daniel Brown, Return J. Meigs, Joseph Gibson, Joseph Cone, Thomas Corcoran, Burgis Allison, Thomas Sewall, and Joseph Thaw: which said Trustees, and their successors, shall forever hereafter be, and they are hereby declared to be, one body politic and corporate, with perpetual succession, in deed and in law, to all intents and purposes whatsoever, by the name, style and title of "The Columbian College in the District of Columbia;" by which name and title, they, the said Trustees, and their successors, shall be competent and capable, at law and in equity, to take to themselves and their successors, for the use of the said College, any estate, in any messuage, lands, tenements, hereditaments, goods, chattels, moneys, and other effects, by gift, grant, bargain, sale, conveyance, assurance, will, devise, or bequest, of any person or persons whatsoever: *Provided,* The same do not exceed, in the whole, the yearly value of twenty-five thousand dollars; and the same messuages, lands, tenements, hereditaments, and estate, real and personal, to grant, bargain, sell, convey, assure, demise, and to farm let,

and place out on interest, for the use of the said College, in such manner as to them, or at least nine of them, shall seem most beneficial to the institution, and to receive the rents, issues, and profits, income and interest, of the same, and to apply the same to the proper use and benefit of the said College: and by the same name to sue, commence, prosecute, and defend, implead and be impleaded, in any courts of law and equity, and in all manner of suits and actions whatsoever, and generally, by and in the same name, to do and transact all and every the business touching or concerning the premises.

SEC. 3. *And be it further enacted,* That the said Trustees shall cause to be made for their use one common seal, with such devices and inscriptions thereon as they shall think proper, under and by which all deeds, diplomas, certificates, and acts of the said College, shall pass and be authenticated; and the same seal, at their pleasure, to break and devise a new one.

SEC. 4. *And be it further enacted,* That the said Trustees, or five of them at least, shall meet at the College, on College Hill, in the said District of Columbia, on the first Monday in March next, for the purpose of concerting and agreeing to such business as, in consequence of this Act, shall be proper to be laid before them at the commencement of the work they have undertaken, and shall have power to adjourn from time to time, as they shall see cause, to any other times or places, for the purpose of perfecting the same. That there shall be a stated meeting of the said Trustees held twice in every year at least, at such place and time as the said Trustees, or a quorum thereof, shall appoint, of which public notice shall be given, after the first meeting, at least twenty days before [the] time of such intended meeting, whenever the President, to be appointed by them, shall deem the business of the institution to require the same, and give due notice thereof, which he is hereby authorized to do; and if, at such stated or occasional meetings, five of the said Trustees shall not be present, those of them who shall be present shall have power to adjourn the meeting to any other day, as fully and effectually, to all intents and purposes, as if the whole number of Trustees for the time being were present; but, if five or more of the said Trustees shall meet at the said appointed times, or at any other time of adjournment, then such five of the said Trustees shall be a board or quorum, and a majority of the votes of them shall be capable of doing and transacting all the business and concerns of the said College not otherwise provided for by this Act; and particularly of making and enacting ordinances for the government of the said College; of electing and appointing the President, Professors, and Tutors, for the said College; of agreeing with them for their salaries and stipends, and removing them for misconduct, or breach of the laws of the institution; of appointing committees of their own body to carry into execution all and every the resolutions of the Board; of appointing a President, Treasurer, Secretary, stewards, managers, and other necessary and customary officers, for taking care of the estate and managing the concerns of the corporation; and, generally, a majority of voices of the board, or quorum of the said Trustees, consisting of five persons at least, at any semi-annual, occasional, or adjourned meeting, after notice given as aforesaid, shall determine all matters and things (although the same be not herein particularly mentioned) which shall occasionally arise, and be incidentally necessary to be determined and transacted by the said Trustees: *Provided always,* That no ordinances shall be of force which shall be repugnant to this charter, or to the laws of the District of Columbia.

SEC. 5. *And be it further enacted,* That the Head or Chief Master for the said College shall be called and styled "The President," and the Masters thereof shall be called "Professors and Tutors;" but neither President, Professors, or Tutors, while they remain such, shall ever be capable of the office of Trustee.

SEC. 6. *And be it further enacted,* That the President, Professors, and Tutors, or a majority of them, shall be called and styled "The Faculty of the College," which Faculty shall have the power of enforcing the rules and regulations adopted by the Trustees for the government of the pupils, by rewarding or censuring them, and, finally, by suspending such of them as after repeated admonitions shall continue disobedient and refractory, until a determination of a quorum of the Trustees can be had; and of granting and confirming, by and with the approbation and consent of a board of the Trustees, signified by their mandamus, such degrees in the liberal arts and sciences, to such pupils of the institution, or others, who, by their proficiency in learning, or other meritorious distinction, they shall think entitled to them, as are usually granted and conferred in colleges; and to grant, to such graduates, diplomas or certificates, under their common seal, and signed by the Faculty, to authenticate and perpetuate the memory of such graduation.

SEC. 7. *And be it further enacted,* That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor, or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion.

SEC. 8. *And be it further enacted,* That no misnomer of the said corporation shall defeat or annul any gift, grant, devise, or bequest, to or from the said corporation: *Provided,* The intent of the parties shall sufficiently appear upon the face of the gift, grant, will, or other writing, whereby any estate or interest was intended to pass to or from the said corporation.

SEC. 9. *And be it further enacted,* That the constitution of the said College, herein and hereby declared and established, shall be, and remain, the inviolate constitution of the said College forever; and the same shall not be altered, or alterable, by any ordinance or law of the said Trustees: *Provided,* That it may be lawful for the Congress of the United States to revoke and repeal this Act, at any and at all times whenever they shall think fit so to do.

SEC. 10. *And be it further enacted,* That it shall be the duty of the said Board of Trustees to keep a regular book or journal, in which shall be entered, under their direction, besides an account of all their ordinary acts and proceedings, all the by-laws, ordinances, rules, and regulations, which may be adopted by the said Board, for their own government, and for the government of the institution; also, a schedule of all the property and effects, real, personal, or mixed, which shall or may be vested in the said Trustees, for the use of the said College, by virtue of any gift, grant, bargain, sale, will, or otherwise, together with annual statements concerning the accounts and finances of the institution. That it shall, moreover, be the duty of the said Trustees, to cause to be enrolled, in the said book or journal, the names of all the contributors to the institution qualified to vote for Trustees, with their respective places of residence; and the said book or journal shall, at all times be open to the inspection or examination of the Attorney General of the United States; and, when required by either House of Congress, it shall be

the duty of said Trustees to furnish information respecting their own conduct, the state of the institution, and of its finances, which shall or may be so required.

SEC. 11. *And be it further enacted,* That in case any vacancy or vacancies shall happen in the Board of Trustees aforesaid by death, inability, resignation, or otherwise, at any time between the stated or triennial elections, that then it shall and may be lawful for the other Trustees, or any five of them, to proceed, at any subsequent meeting after the happening of such vacancy or vacancies, to choose, by ballot, any suitable person or persons to fill the same.

SEC. 12. *And be it further enacted,* That the employment or application of the funds or income of the said corporation, or any part thereof, for any purpose or object other than those expressed and defined in the first section of this Act, or the investment thereof in any other mode than is described and provided in the second section thereof, shall be deemed and taken to be a forfeiture of all the rights and immunities derived from this Act, and the same shall, thenceforth, cease and become null and void.

Approved, February 9, 1821.

By Act of Congress of July 14, 1832, there were donated to the Columbian College Washington city lots to the value of twenty-five thousand dollars; the Act providing that the fund arising from the proceeds of the sale of the lots should constitute an endowment fund for the support of professorships. By Act of February 28, 1839, permission was granted to the College to use seven thousand dollars of the fund for the payment of its debts.

By Act of Congress of February 21, 1871, a form of government by an elected Governor and Legislative Assembly was established for the District of Columbia, and on July 25, 1871, the Legislative Assembly passed the following statute:

An Act for the relief of the Columbian College, in the District of Columbia.

Be it enacted by the Legislative Assembly of the District of Columbia, That the Columbian College, in the District of Columbia, chartered by and organized and acting under the Act of Congress approved February nine, eighteen hundred and twenty-one, may, from the proceeds of any sale of its property, apply such sum as may be needful to pay its present indebtedness and place its libraries, buildings, and apparatus of instruction in good condition, and execute all deeds needful to quiet the title of property already sold.

SEC. 2. *And be it further enacted,* That the Trustees of said College elected in May last shall constitute the corporation of said College until their successors in office shall be chosen and qualified as hereinafter provided, and may, until then, as vacancies occur in their number, temporarily fill them by the election of fit persons residing in the District of Columbia.

SEC. 3. *And be it further enacted,* That the said Trustees shall meet in the Law Building of said College at noon, on the twenty-fifth day of June, eighteen hundred and seventy-two, for the purpose of choosing, and shall then and there, or at the time and place to which said meeting

may be adjourned, elect thirteen Trustees and thirteen Overseers, who shall, upon their election, constitute the College corporation, and they and their successors shall thenceforward be, and be known and recognized as, the Columbian College in the District of Columbia.

SEC. 4. *And be it further enacted,* That the Trustees chosen at the said meeting in June, eighteen hundred and seventy-two, or who may thereafter be chosen, shall be residents of the District of Columbia, and that at said meeting, and at any annual meeting of Trustees and Overseers to be thereafter held in said City of Washington on the Tuesday next preceding the last Wednesday in June, annually, the Trustees and Overseers in convention assembled shall fill vacancies in their Board, and shall, by ballot, elect from among the Trustees two suitable persons, one to be President and the other to be Treasurer and Secretary of said corporation and of the Board of Trustees, and shall establish ordinances and by-laws, or alter or repeal the same; and also frame laws and regulations for the College Faculty and students in all the departments thereof, and by ballot elect such teachers, tutors, professors, lecturers, and President, and with such salaries and duties as said corporation may deem proper.

SEC. 5. *And be it further enacted,* That at said annual meetings not less than seven Trustees and three Overseers shall constitute a quorum for the transaction of any business except adjournment, and adjournment may be made by any number present: *Provided,* That a final adjournment shall not be delayed beyond one week after the time fixed for the annual meeting.

SEC. 6. *And be it further enacted,* That during the interval between said annual meeting the Trustees shall, as now, hold semi-annual, quarterly, monthly, and occasional meetings to fill temporarily, as the case may require, vacancies in the Faculty or in their own Board, and with all their present powers as modified by this Act, subject to the ordinances and by-laws of the corporation; but no real estate or other property of said corporation shall, after the twenty-fifth day of June, eighteen hundred and seventy-two, be disposed of by the Trustees, except by vote of the corporation or in pursuance of its ordinances.

Approved, July 25, 1871.

This Act of the Legislative Assembly of the District was confirmed by Congress in 1873, and by the same statute the College was given the name of "the Columbian University." This Act was as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbia[n] College, in the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act to incorporate the Columbia[n] College in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, be, and the same is hereby, so modified that said corporation shall be hereafter known and called by the name of the Columbia[n] University, and in that name shall take, hold and manage all the estate and property now belonging to said College, or that may hereafter be conveyed, devised, or bequeathed to said corporation by its original name; that the restriction of the yearly value of the property of the said corporation to the sum

of twenty-five thousand dollars be, and the said restriction is hereby, repealed; and that said corporation may increase the number of its Overseers to twenty-one, and the number of its Trustees to twenty-one, exclusive of the President of the Faculty, who shall be, *ex officio,* a Trustee of said corporation.

SEC. 2. That the Act for the Relief of the Columbian College in the District of Columbia enacted by the Legislative Assembly of said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be, and the same is hereby, approved and confirmed: *Provided,* That this Act nor the said Act of the Legislative Assembly of the said District, shall be so construed as to authorize the said Columbian University to sell, or use the proceeds of any sale of land granted by Congress to said institution for any purpose other than that expressed in the Act of Incorporation and the Act granting any such land or real estate, or contrary to any will, devise or grant of any land or real estate heretofore or hereafter made, by any person or persons to said institution.

Approved, March 3, 1873.

By the Act of Congress of May 31, 1878, it was provided that the annual meeting of the corporation might be held either in May or June, and by the Act of January 14, 1893, it was provided that the Secretary and the Treasurer might be elected from the Trustees or not, as the Board of Trustees might deem proper, and that it should not be necessary that both offices should be held by one person.

In 1898 Congress amended the charter by an Act as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Columbian University, on and after the first day of June, eighteen hundred and ninety-eight, shall be under the management and control of a Board of Trustees, consisting of twenty-two members; the President of the University shall be *ex officio* a member of said Board, and the remaining twenty-one shall be divided into three classes with seven members in each class; a majority of said Board shall be residents of the District of Columbia, and seven members shall constitute a quorum for the transaction of business. That on or before the thirty-first day of May, eighteen hundred and ninety-eight, a meeting of the Trustees and Overseers of said University shall be held, and said meeting shall elect twenty-one Trustees, seven of whom shall be designated to serve from the first day of June, eighteen hundred and ninety-eight, until the annual meeting in eighteen hundred and ninety-nine; and seven from the same date until the annual meeting in nineteen hundred; and seven until the annual meeting in nineteen hundred and one. Two-thirds of said Trustees, and also the President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination; said Trustees so elected shall serve for the periods mentioned and until their successors are elected.

That on the first day of June, eighteen hundred and ninety-eight, the terms of office of the present Trustees and Overseers shall cease and determine, and thereupon the control and management of said University, its property and trusts, shall vest in the Board of Trustees elected as hereinabove provided and their successors.

SEC. 2. That at the annual meeting in eighteen hundred and ninety-nine, and annually thereafter, there shall be elected by the Board of Trustees seven Trustees to fill the places of the class whose terms of office expire; and the Board of Trustees may prescribe in a by-law the mode of nominating persons for election as Trustees. A failure to elect Trustees at the annual meeting shall not create vacancies in the Board, but such election may be had and vacancies occurring during the year may be filled for the unexpired term by the Board at any general or special meeting.

SEC. 3. That the Board of Trustees provided for herein shall have, and they are hereby given, full power and authority to appoint and remove any and all officers, professors, lecturers, teachers, tutors, agents, and employees who are now or may hereafter be elected or appointed; they may, by a vote of two-thirds of all the Trustees constituting said Board, adopt and change by-laws for the conduct of the business and educational work of said University; they may appoint an Executive Committee composed of Trustees, designate the number and Chairman thereof, with such powers and authority as are usually exercised by an Executive Committee, and which shall be conferred by the Board, subject always to the control of the Board of Trustees; they may create and establish schools and departments of learning to be connected with and become a part of said University; they may receive, invest, and administer endowments and gifts of money and property for the maintenance of educational work by said University, and by any department and chair thereof now established or which may hereafter be created or established by said University; and they shall have all the powers and authority heretofore granted to and vested in the Trustees and Overseers of said University.

SEC. 4. That the annual meeting of the Board of Trustees shall be held in the City of Washington, District of Columbia, on the Wednesday nearest the first day of June in each year; two other stated meetings shall be held on the second Wednesday of October and January in each year, and special meetings may be called by the President of the University or by the Executive Committee or by seven members of the Board of Trustees upon such notice and at such hour and place as may be designated in the by-laws; at all meetings any business necessary to be transacted may be considered and acted upon, and any meeting may be adjourned from time to time by the Trustees present, whether constituting a quorum or not, notice of such adjournment to be given, as of called meetings, to those Trustees not present.

SEC. 5. That the terms of office of the President of the University, the Treasurer and other officers, professors, and lecturers, and the employment of agents and employees, and the title to all the property and rights in and management of the endowment funds of the University shall not be affected by the change of management herein provided for, but they shall continue and be subject to the control and management of the Board of Trustees hereby created the same as they are now subject to the control and management of the corporation.

SEC. 6. That all acts and parts of acts inconsistent with the provisions of this Act are hereby repealed.

Approved, March 18, 1898.

In 1904 Congress passed an Act restoring the non-denominational character of the institution and permitting the change of its name. This Act and the certificate of change of name were as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act to incorporate the Columbian College, in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, and the amendatory Act approved March eighteenth, eighteen hundred and ninety-eight, be, and the same are hereby, amended by repealing and striking out of the said charter the following words in lines twenty to twenty-five in section one of the said amendatory Act of March eighteenth, eighteen hundred and ninety-eight, namely, "Two-thirds of said Trustees, and also the President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination."

SEC. 2. That section thirteen of the original charter of February ninth, eighteen hundred and twenty-one, which provides "That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion," be, and the same is hereby, re-enacted and shall be hereafter in full force as a part of said charter.

SEC. 3. That power is hereby given to the Board of Trustees of said University to change the name of said University at any regular meeting by a vote of not less than two-thirds of the total number of members of the Board, as prescribed by the charter, subject to the approval of the Secretary of the Interior and the Commissioner of Education. That upon said action being taken a certificate, under the seal of the University, stating the name adopted and the date when the name shall go into effect not less than thirty days nor more than six months from the date of its adoption, together with the fact that said name has been adopted as herein prescribed, shall be filed in the office of the Recorder of Deeds of the District of Columbia, and thereupon, upon the date specified for the name to go into effect, the University shall be known and designated by the name adopted, and by said new name the said University shall be vested with and convey its real estate, hold, control, and administer endowments and gifts of money and property heretofore and hereafter made for the maintenance of its educational work, and do and perform all acts which it now has the power to do under its said charter. Such change of name shall not in any other way change, affect, or modify in any degree the rights, privileges, obligations, and powers of the said University under the charter of February ninth, eighteen hundred and twenty-one, and the amendatory Acts thereto.

SEC. 4. That all Acts and parts of Acts inconsistent with this Act are hereby repealed.

Approved, January 23, 1904.

Certificate of Change of Name of the Columbian University to "The George Washington University."

DISTRICT OF COLUMBIA,
City of Washington:

The Columbian University, in accordance with the Act of Congress approved January 23, 1904, does hereby certify that, at the regular meeting of its Board of Trustees, duly held on the eighth day of June, 1904, at which meeting there were present more than two-thirds of the total number of members of the Board, it was unanimously resolved that, subject to the approval of the Secretary of the Interior and the Commissioner of Education, prescribed by said Act of Congress, the name of this University be changed to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904.

And it is hereby further certified, that on the twentieth day of June, A. D. 1904, the Secretary of the Interior and the Commissioner of Education duly approved in writing said change of name, which said written approval is hereto attached and made a part hereof.

In testimony whereof, said Columbian University has given this its certificate under its corporate seal, at the City of Washington, D. C., on the twenty-first day of June, A. D. 1904.

CHARLES W. NEEDHAM,
President.

Attest:
JOHN B. LARNER,
Secretary.

(Corporate Seal.)

UNITED STATES OF AMERICA,
DEPARTMENT OF THE INTERIOR,
WASHINGTON, D. C., *June* 20, 1904.

Pursuant to section 882 of the Revised Statutes, I hereby certify that the annexed paper is a true copy of the original as it appears upon the files of the Department.

In testimony whereof, I have hereunto subscribed my name, and caused the seal of the Department of the Interior to be affixed, the day and year first above written.

E. A. HITCHCOCK,
Secretary of the Interior.
W. B. A.

(Seal of the Department of the Interior.)

Whereas by Act of Congress approved January 23, 1904, the Columbian University was authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education;

And whereas it has been made satisfactorily to appear to us that, at the regular meeting of the Board of Trustees of said University, held on the eighth day of June, A. D. 1904, at which meeting there were present more than two-thirds of the total number of members of said Board, it was unanimously resolved to change the name of said University to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904;

Now, therefore, this is to witness that, pursuant to said Act of Congress, we do hereby, this twentieth day of June, A. D. 1904, approve said change of name.

E. A. HITCHCOCK,
Secretary of the Interior.
W. T. HARRIS,
Commissioner of Education.

(Seal of the Department of the Interior.)

In 1905 a further amendment to the charter was made, as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That The George Washington University shall have, and is hereby given, power to increase the number of its Trustees from time to time, by a two-thirds vote of the whole number of the Trustees at the time such vote is taken, to a number not exceeding forty-five. In case of the increase of the number of Trustees a certificate, stating the number of the Board and the time when it shall go into effect and that the action so taken was by a two-thirds vote as required by this Act, shall be filed with the Recorder of Deeds of the District of Columbia, and upon and after the date named the Board shall consist of the number of Trustees, stated in such certificate, and said Board may also appoint a Board or Boards of Visitors for any department or departments of educational work carried on by the University, such Boards of Visitors to be advisory only.

SEC. 2. That by and with the consent of said University, Colleges may be organized hereunder for the purpose of carrying on, in connection with the University, special lines of educational work in the arts, sciences, and liberal and technical knowledge, such Colleges to be educationally a part of the system of the University, but upon independent financial foundations, and to this end any five or more persons desirous of associating themselves for the purpose of establishing a College hereunder, may make, sign, and acknowledge before any officer authorized to take acknowledgment of deeds in the District of Columbia, and with the assent of the University in writing, file in the office of the Recorder of Deeds of the said District a certificate in writing, in which shall be stated: First, the intention to organize a corporation under this Act and the assent of the University thereto; second, the name or title by which the College shall be known in law; third, the names of the Trustees constituting the first Board, and such Trustees may be divided into three classes, the term of office of one class expiring annually; fourth, the manner of nominating and electing successors to said Trustees; fifth, the branch or branches of literature, arts, sciences, liberal or technical knowledge proposed to be taught; sixth, that the highest officer of said College shall be a Dean, the Dean and members of the Faculty to be members of the Educational Councils of the University in accordance with the rules governing the University; seventh, that all degrees shall be bestowed by the

University; eighth, that in all financial and legal responsibility the College shall be an independent organization. Upon filing such certificate the Trustees named therein and their successors shall be a body politic, incorporated by the name and style stated in the certificate, and by that name and style shall have perpetual succession in association with the University, with power in the College to sue and be sued; plead and be impleaded; to acquire, hold, and convey property in all legal ways; to receive by gift, devise, or otherwise, and hold, control, and administer endowments and gifts of money and property thereafter made to it for the maintenance of its educational work; to have and use a common seal, and to alter and change the same at pleasure; to make and alter from time to time such by-laws, not inconsistent with the Constitution of the United States or the laws in force in said District or the laws of the University regulating the conduct of educational work, as may be deemed necessary for the government of the College, but said College shall not confer academic or honorary degrees; such College shall hold the property of the institution and all moneys and property conveyed to it by purchase, gift, conveyance, will, devise, or bequest solely for the purposes of the educational work specified in said certificate; the Trustees of such College shall faithfully apply all funds collected or received and the proceeds thereof belonging to the institution, according to their best judgment, in purchasing lands and erecting buildings, supporting necessary officers, instructors, and servants, and procuring all equipment, educational and otherwise, necessary to carry on the work of the College.

SEC. 3. That said University may enter into affiliated agreements with any institutions of learning outside of the District of Columbia, for the purpose of giving to students of such institutions the educational facilities of said University and the Departments of the Government in the City of Washington which are by law open to students, upon such terms as are mutually agreed upon by the said University and the affiliated institutions.

Approved, March 3, 1905.

Under section 2 of this amendment, two Colleges have been organized to carry on educational work forming a part of the regular undergraduate curriculum—The Columbian College and The Washington College of Engineering. This new Columbian College was first organized in 1904,—contemporaneously with the change of name of the University—under the general educational incorporation act of the District. In 1905, the new Columbian College was reincorporated under section 2 of the amendment of 1905. The new Columbian College and the Washington College of Engineering have always remained inactive, and have been in fact superseded by the establishment of the College of Arts and Sciences and the College of Engineering and Mechanic Arts, which are Departments of the University.

Under section 2 of the Act of 1905, there now exist two colleges which are doing special educational work and which are in active operation—the National College of Pharmacy, organized in 1905, and the College of Veterinary Medicine, organized in 1908. The financial

affairs of these Colleges are separate from those of the University, and are managed by their separate Boards of Trustees. The Faculties of these Colleges are also appointed by their respective Boards of Trustees. The connection between these Colleges and the University consists in the fact that their Deans are members of the President's Council, and that the Board of Trustees of the University confers degrees for the work done in these Colleges.

By resolutions of the Board of Trustees of the University of May 6, 1909, and January 12, 1910, provision was made for the nomination by the Alumni of two Alumni Trustees each year. In the spring of 1910, this plan was put in operation, and since then the two persons nominated as Alumni Trustees have been elected to membership on the Board.

BY-LAWS OF THE GEORGE WASHINGTON UNIVERSITY.

ARTICLE I.

The President of the University.

SECTION 1. The President of the University shall hold office without limit of time, until his resignation be accepted, or he be removed from office by the Board of Trustees; he shall be the executive head of the University and of all its departments, exercising such supervision, direction, and control as will promote the efficiency of every department; he shall be responsible, under the supervision of the Board of Trustees, for the discipline of the University; he shall preside at the meetings of the Faculties, and be the official medium of communication between the Faculties and the Board of Trustees, and between the students of the University and the Board of Trustees; he shall recommend to the Board of Trustees appointments to the several Faculties; he shall be responsible for carrying out such measures concerning the internal administration of the University as the Board of Trustees may enact. He shall make a yearly report to the Board of Trustees at the January meeting concerning the state of the University. He shall control the expenditure and administration of the yearly budget when formally adopted by the Board of Trustees.

ARTICLE II.

Board of Trustees.

SECTION 1. No member of the teaching staff of the University except the President of the University, or of the teaching staff of any college incorporated under the charter of the University, while he remains such, shall be capable of holding the office of Trustee of the University.

SEC. 2. At the annual meeting of the Board after the election of Trustees, the Board shall elect by ballot from among their number a Chairman and Vice-Chairman of the Board to serve until the next annual meeting and until their successors are elected and qualified. The Chairman of the Board, and in his absence the Vice-Chairman, shall preside at all meetings of the Board of Trustees.

SEC. 3. At the annual meeting after the election of Trustees the Board shall elect by ballot the following officers, to serve until the next annual meeting and until their successors are elected and qualified: a Secretary, a Treasurer, an Auditor, and a Counsel of the University.

SEC. 4. In the event of a failure for any reason so to elect either or all of the said officers, or in case of any vacancy from any cause, then an election may be held for the unexpired term at a meeting called for that purpose.

SEC. 5. The annual meeting of the Board of Trustees shall take place on the Wednesday nearest the first day of June of each year.

SEC. 6. Stated meetings of the Board shall be held on the second Wednesdays of October and January.

SEC. 7. Notice of all stated meetings shall be mailed by the Secretary of the University to each member of the Board at least five days previous to the time of such meetings.

SEC. 8. Special meetings may be called at any time by the President of the University, the Executive Committee, or by seven members of the Board of Trustees. The Secretary shall issue the notices of such meetings.

SEC. 9. The call for special meetings shall state the nature of the business to be considered, and shall be mailed at least two days before the meeting is to be held.

SEC. 10. Seven members of the Board of Trustees shall constitute a quorum for the transaction of any business.

ARTICLE III.

Executive Committee.

SECTION 1. There shall be an executive committee of seven members of the Board of Trustees, of which the President of the University shall be a member *ex officio*. The other members of the Committee shall be elected by ballot at the annual meeting, and shall serve until their successors are elected. The Board shall designate one of the members of the Committee to act as Chairman.

SEC. 2. In case of inability to act on the part of any member of the Committee his place may be filled by the Board of Trustees.

SEC. 3. Four members of the Committee shall constitute a quorum for the transaction of business.

SEC. 4. The Committee is authorized to transact such business as may require attention between the regular meetings of the Board of Trustees; but the Chairman of the Committee shall make a report at each stated meeting of the Board on the proceedings of the Committee during the intervening period, and at any meeting of the Board, if any member of the Board shall request that the report of the proceedings of any meeting or meetings of the Committee be read, the same shall be read by the Secretary.

SEC. 5. Regular meetings of the Committee shall be held during the academic year monthly, on the second Tuesday of the month, and special meetings may be called by the Secretary whenever requested by the Chairman or any two members of the Committee.

SEC. 6. In case of inability to act on the part of the Chairman of the Committee, the Committee may appoint a temporary chairman for the meeting.

Article IV.

Chairman of the Executive Committee.

Section 1. It shall be the duty of the Chairman of the Executive Committee to have the superintendence of the business affairs of the corporation and to keep the Executive Committee and the Board of Trustees informed concerning the same, and to see that all matters of business relating to the corporation are regularly presented to the Executive Committee and the Board for action.

Article V.

Standing Committees.

Section 1. At the annual meeting there shall be appointed a Committee of three members for each school or department of the University, who shall visit and inspect the conditions and conduct of the school or department and make a written report thereon to the stated meetings of the Board of Trustees. Provisional appointments to any Faculty may be made by the President after consideration of the nomination of the Dean of the Faculty, and, with the approval of the committee of the school immediately concerned, the appointment to hold good until the next meeting of the Board.

Article VI.

The Secretary of the University.

Section 1. The Secretary of the University shall as such attend and keep minutes of all meetings of the Board of Trustees, the Executive Committee, the educational councils and faculties, as may by resolution of the Board be required to keep records. He shall give to any meeting at which he is entitled to be present any information concerning University affairs which he may have and which may be proper to be brought before such meeting. He shall have the custody of all the files and records of the University proper to his office; he shall have the custody of the corporate seal of the University, and shall affix it to corporate acts authorized by the Board of Trustees or the Executive Committee, and he shall generally do and perform such administrative duties as may be assigned him by the President from time to time not inconsistent with the by-laws.

Article VII.

The Treasurer of the University.

Section 1. The Treasurer shall give a bond or shall be bonded in a surety company, at the expense of the University, for the faithful per-

formance of his duties in such sum and with such sureties as shall be approved by the Board of Trustees.

SEC. 2. He shall keep all the funds of the University in such bank or banks as the Board of Trustees shall designate; he shall keep the trust funds, and the full account thereof, separate from the current or general funds and accounts of the University; he shall make monthly statements, showing the current financial operations and the condition of the trust funds and other invested funds to the Executive Committee; he shall make a full report annually to the Board of Trustees as specified in Article XI, and he shall at such other times make such reports as the Trustees may require.

SEC. 3. He shall make payments only by checks upon the bank countersigned by the President of the University, or in his absence by the Secretary, and only for investments, salaries, bills, and expenses authorized by the Board of Trustees or the Executive Committee, provided, however, that when the Treasurer is absent or incapacitated, or when the office of Treasurer is vacant, or when the President and Secretary are both absent or incapacitated, or in any other emergency, the Executive Committee may by resolution make special and temporary arrangements for the signing or countersigning of checks.

ARTICLE VIII.

The Auditor of the University.

SECTION 1. The Auditor of the University shall make three audits each year of the books and accounts of the Treasurer. The fiscal year shall end at midnight on June 30th of each year, and the accounts shall be audited as of December 31st, March 31st, and June 30th at midnight. The respective audits shall be completed before February 1st, May 1st, and August 1st in each year.

SEC. 2. A corporation may be elected by the Board of Trustees as the Auditor of the University.

ARTICLE IX.

The Counsel of the University.

SECTION 1. The Counsel of the University shall render opinions to the President, the Board of Trustees, or to the Executive Committee, when requested, upon legal questions arising in the management of the educational or business affairs of the University, and shall represent the University in all legal proceedings prosecuted by or against the University. The Counsel of the University may be a member of the Board of Trustees.

Article X.

Committee on Catalogue.

Section 1. In June of each year the annual catalogue of the University shall be prepared by a committee consisting of the President of the University as Chairman, the Secretary of the University, and three members of the Faculty of the University appointed by the President. The catalogue shall be published annually in pamphlet form. Each annual catalogue shall contain the charter and by-laws of the University.

Article XI.

Annual Financial Report.

Section 1. Between July 1st and October 1st in each year there shall be prepared by the Treasurer a financial report showing in detail the financial condition of the University during the previous year, which financial report shall be certified by the Auditor to be correct. This report shall be filed with the Secretary on or before October 1st, and shall be laid before the Board of Trustees at their October meeting, and when approved by the Board of Trustees shall, with any modifications ordered by them and assented to by the Treasurer and Auditor, be printed by the University in pamphlet form.

Article XII.

Sale of Land and Other Assets.

Section 1. Real estate and other securities of the University shall not be sold or disposed of except by direction of the Board of Trustees.

Sec. 2. All deeds and conveyances of real estate belonging to the University shall be signed by the President of the University and the Secretary, and the same shall be acknowledged, attested, and the seal of the University attached thereto by the Secretary.

Article XIII.

Amendments.

Section 1. These by-laws may be amended or repealed at any meeting of the Board by a vote of two-thirds of all the members of the Board.

Article XIV.

Former By-Laws Repealed.

Section 1. All by-laws heretofore enacted are hereby repealed.

THE BOARD OF TRUSTEES.

CHARLES HERBERT STOCKTON, LL.D.,
President of the University.

1912.

GIST BLAIR, A.B., LL.B., Union Trust Building.
LEWIS FLEMER, Phar.D., 701 Maryland Avenue, N. E.
JOHN JAMES HEMPHILL, A.M., Washington Loan & Trust Building.
ABRAM LISNER, 1723 Massachusetts Avenue, N. W.
THEODORE WILLIAMS NOYES, A.M., LL.M.,
1101 Pennsylvania Avenue, N. W.
HENRY CLEVELAND PERKINS, 1701 Connecticut Avenue, N. W.
MAXWELL VAN ZANDT WOODHULL, A.M., 2033 G Street.

1913.

HENRY GUSTAV BEYER, M.D., Ph.D., 1725 H Street.
ALDIS BIRDSEY BROWNE, LL.B., 1419 F Street, N. W.
*JOHN JOY EDSON, LL.B., Washington Loan & Trust Company.
SAMUEL HARRISON GREENE, A.M., DD., LL.D., 1320 Q Street, N. W.
ARCHIBALD HOPKINS, A.M., LL.B., 1826 Massachusetts Avenue, N. W.
WILLIAM ANDREW MEARNS, LL.M., 2301 S Street.
*AUGUSTUS STORRS WORTHINGTON, LL.B., 416 Fifth Street, N. W.

1914.

THOMAS HENRY ANDERSON, LL.D., 1531 New Hampshire Avenue, N. W.
*HARRY CASSELL DAVIS, A.M., L.H.D., 1006 Massachusetts Avenue, N. W.
WILLIAM JAMES FLATHER, Riggs National Bank.
WILLIAM DAVID HOOVER, LL.M., National Savings & Trust Company.
*JOHN BELL LARNER, LL.B., LL.D., 900 F Street, N. W.
HENRY BROWN FLOYD MACFARLAND, 1420 New York Avenue, N. W.
WILLIAM HENRY SINGLETON, A.B., 2020 H Street, N. W.

* Nominated by the Alumni.

Chairman of the Board of Trustees.

JOHN BELL LARNER.

Vice-Chairman of the Board of Trustees.

ARCHIBALD HOPKINS.

Standing Committees of the Board of Trustees.

Executive: Davis, Flather, Hopkins, Larner, Lisner, Singleton, Stockton.
Auditing: Singleton, Flather, Mearns.
Subscriptions and Endowments: Lisner, Macfarland, Perkins, Edson, Browne.
Departments of Medicine, Dentistry, and the Hospital: Beyer, Larner, Edson.
Associated Colleges: Edson, Browne, Flemer.
Graduate Studies and Teachers College: Macfarland, Hopkins, Hemphill.
Arts and Sciences: Greene, Singleton, Noyes.
Engineering: Perkins, Hoover, Woodhull.
Department of Law: Anderson, Larner, Worthington.
College of the Political Sciences: Hopkins, Hemphill, Blair.

RICHARD COBB, *Secretary of the University.*
CHARLES WENDELL HOLMES, *Treasurer of the University.*
AMERICAN AUDIT COMPANY, *Auditor of the University.*

ADMINISTRATION AND INSTRUCTION.

President of the University,

CHARLES HERBERT STOCKTON, LL.D.

President's Council.

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY
RICHARD COBB, A.B.....Secretary of the University
CHARLES EDWARD MUNROE, Ph.D.....Professor of Chemistry, and Dean of the Faculty of Graduate Studies
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
WILLIAM ALLEN WILBUR, A.M.....Professor of English, and Dean of the College of Arts and Sciences
GEORGE NEELY HENNING, A.M.....Professor of Romance Languages
HOWARD LINCOLN HODGKINS, Ph.D....Professor of Mathematics, and Dean of the College of Engineering and Mechanic Arts
OSCAR ALEXANDER MECHLIN, C.E.....Assistant Professor of Civil Engineering
HENRY PARKER WILLIS, Ph.D.....Professor of Finance, and Dean of the College of the Political Sciences
CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History
WILLISTON SAMUEL HOUGH, Ph.M.....Professor of Philosophy, and Dean of the Teachers College
WILLIAM CARL RUEDIGER, Ph.D...Professor of Educational Psychology
CHARLES NOBLE GREGORY, A.M., LL.D.....Professor of Law, and Dean of the Faculty of Law
JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
WILLIAM CLINE BORDEN, M.D.....Dean of the Faculty of Medicine
FREDERICK FULLER RUSSELL, M.D.....Professor of Pathology and Bacteriology
JOHN ROLAND WALTON, D.D.S.....Dean of the Faculty of Dentistry
HENRY E. KALUSOWSKI, Phar.D.....Dean of the National College of Pharmacy
DAVID EASTBURN BUCKINGHAM, V.M.D....Dean of the Faculty of the College of Veterinary Medicine

UNIVERSITY MEMBERS OF FACULTIES AND TEACHING STAFF.*

(Arranged, with the exception of the President, in groups, in the order of appointment.)

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY

Professors.

J. FORD THOMPSON, M.D.....Professor of Surgery, Emeritus
ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D....Professor of Obstetrics, and Dean Emeritus of the Faculty of Medicine
THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D....Professor of Zoölogy, Emeritus
GEORGE NICHOLAS ACKER, A.M., M.D.....Professor of Pediatrics and Clinical Professor of Medicine
HOWARD LINCOLN HODGKINS, Ph.D.....Professor of Mathematics, and Dean
HENRY CRÈCY YARROW, M.D.....Professor of Dermatology, Emeritus
DANIEL KERFOOT SHUTE, A.B., M.D.....Professor of Neuro-Anatomy, and Clinical Professor of Ophthalmology
HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
STERLING RUFFIN, M.D.....Professor of Medicine
CHARLES EDWARD MUNROE, Ph.D....Professor of Chemistry, and Dean
GEORGE PERKINS MERRILL, Ph.D.....Professor of Geology and Mineralogy
CHARLES WILLIAMSON RICHARDSON, M.D....Professor of Laryngology, Rhinology, and Otology
FRANK WIGGLESWORTH CLARKE, Sc.D...Professor of Mineral Chemistry
HARVEY WASHINGTON WILEY, M.D., Ph.D., LL.D.....Professor of Agricultural Chemistry
MELVILLE CHURCH, LL.M.....Professor of the Law of Patents
WILLIAM ALLEN WILBUR, A.M.....Professor of English, and Dean
JOHN WESLEY BOVÉE, M.D.....Professor of Gynecology
THOMAS ASH CLAYTOR, M.D.....Clinical Professor of Medicine
AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery
CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History
RANDOLPH BRYAN CARMICHAEL, M.D.....Professor of Dermatology
FRANCIS RANDALL HAGNER, M.D..Professor of Genito-Urinary Surgery and Venereal Diseases
WALTER COLLINS CLEPHANE, LL.M.....Professor of Law

* NOTE.—In many instances members of the Teaching Staff give only part time to the University. For the names of the members of the Faculties and Teaching Staff of the Associated Colleges, see Part III of this catalogue.

MITCHELL CARROLL, Ph.D...Professor of Greek and the History of Art
PAUL BARTSCH, Ph.D.....Professor of Zoölogy
EDWIN CHARLES BRANDENBURG, LL.M.....Professor of Law
ARTHUR PETER, LL.M.....Professor of Law
WILLIAM CREIGHTON WOODWARD, M.D., LL.M....Professor of Medical Jurisprudence
ALBERT LIVINGSTON STAVELY, M.D.....Clinical Professor of Gynecology
GEORGE NEELY HENNING, A.M.....Professor of Romance Languages
JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
JOHN ROLAND WALTON, D.D.S....Professor of Prosthetic Dentistry and Orthodontia, and Dean
WILLIAM ALANSON WHITE, M.D.....Professor of Psychiatry, and Clinical Professor of Neurology
CHARLES WILLIAM AUGUST VEDITZ, LL.B., Ph.D.....Professor of Sociology
GEORGE LANSING RAYMOND, L.H.D.....Professor of Aesthetics
WILLISTON SAMUEL HOUGH, Ph.M..Professor of Philosophy, and Dean
GEORGE MILLER STERNBERG, M.D., LL.D., Professor of Preventive Medicine
ASAPH HALL, JR., Ph.D.....Professor of Astronomy
ARTHUR AUGUSTIN SNYDER, M.D.....Clinical Professor of Surgery
ISAAC WRIGHT BLACKBURN, M.D.....Professor of Morbid Anatomy
ALBERT MANN, A.M., Ph.D.....Professor of Botany
SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology
HENRY PARKER WILLIS, Ph.D.....Professor of Economics and Finance, and Dean
CHARLES SIDNEY SMITH, Ph.D.....Professor of Greek and Latin
WENDELL PHILLIPS STAFFORD, LL.D.....Professor of Law
JOSIAH ALEXANDER VAN ORSDEL, LL.D.....Professor of Law
WILLIAM CLINE BORDEN, M.D.....Professor of Surgery, and Dean
JOHN RYDER WELLINGTON, M.D.....Clinical Professor of Surgery
CHARLES STANLEY WHITE, M.D.....Professor of Oral Surgery and Associate in Surgery
HURON WILLIS LAWSON, M.D..Professor of Histology and Embryology and Associate in Anatomy and Surgery
DANIEL WEBSTER PRENTISS, M.D.....Professor of Hygiene
WILLIAM KENNEDY BUTLER, A.M., M.D...Professor of Ophthalmology
FREDERICK FULLER RUSSELL, M.D.....Professor of Pathology and Bacteriology
BUCKNER MAGILL RANDOLPH, M.D....Professor of Materia Medica and Therapeutics
CHARLES S. BUTLER, M.D.....Professor of Tropical Diseases
LUTHER HALSEY REICHELDERFER, M.D....Clinical Professor of Surgery
JOHN ROBERT DE FARGES, D.D.S.....Professor of Dental Metallurgy, Economics, Jurisprudence, and Ethics

LOUIS ANATOLE LA GARDE, M.D.....Professor of Military Surgery
THOMAS MALCOLM PRICE, Ph.D..Professor of Physiological Chemistry
WILLIAM CARL RUEDIGER, Ph.D...Professor of Educational Psychology
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor of German, and Librarian
WILLIS LUTHER MOORE, Sc.D., LL.D.....Professor of Practical Meteorology
WILLIAM JACKSON HUMPHREYS, C.E., Ph.D.....Professor of Meteorological Physics
CHARLES NOBLE GREGORY, A.M., LL.D.....Professor of Law, and Dean
WILLIAM CABELL MOORE, M.D.....Professor of Anatomy
NOBLE PRICE BARNES, M.D.....Professor of Materia Medica, Associate Professor of Materia Medica and Therapeutics, and Clinical Associate in Medicine.

Associate Professors.

CHARLES TURK BASSETT, D.D.S.....Associate Professor in Charge of Dental Infirmary
ALLEN SCOTT WOLFE, D.D.S..Associate Professor of Crown and Bridge Work and Porcelain
CADMUS LINDEN ODOR, D.D.S.....Associate Professor of Operative Technics and Comparative Anatomy
WILLIAM FRANCIS LAWRENCE, D.D.S.....Associate Professor of Prosthetic Technics
JAMES DUDLEY MORGAN, A.B., M.D....Associate Professor of Medicine, and Clinical Professor of Medicine
CHARLES FRANKLIN CRAIG, M.D.....Associate Professor of Pathology and Bacteriology
ARTHUR B. CRAIG, D.D.S.....Associate Professor of Oral Surgery

Assistant Professors.

EDWARD GRANT SEIBERT, M.D....Assistant Professor and Associate in Chemistry and Instructor in Ophthalmology and Associate in Laryngology.
NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry
PHILANDER BETTS, E.E...Assistant Professor of Electrical Engineering
EDWIN ALLSTON HILL, Ph.D.....Assistant Professor of Chemistry
RAY SMITH BASSLER, Ph.D.....Assistant Professor of Geology
DE WITT C. CROISSANT, A.B.....Assistant Professor of English
PERLEY GILMAN NUTTING, Ph.D.....Assistant Professor of Physics
EDWIN VIVIAN DUNSTAN, C.E.....Assistant Professor of Civil Engineering
OSCAR ALEXANDER MECHLIN, C.E.....Assistant Professor of Civil Engineering

JOHN WILMER LATIMER, LL.B.....Assistant Professor of Law
OTIS DOW SWETT, M.S., LL.M.....Assistant Professor of Chemistry
CHARLES WARD MORTIMER, B.S., M.E.....Assistant Professor of Electrical Engineering
FRANK CHARLES STARR, S.B...Assistant Professor of Civil Engineering
BLAINE FREE MOORE, A.B.....Assistant Professor of Political Science
EVERETT FRASER, A.B., LL.B.....Assistant Professor of Law
HIRAM COLVER MCNEIL, Ph.D.....Assistant Professor of Physical Chemistry
ROBERT RUSS KERN, A.B.....Assistant Professor of Economics and Sociology
LEVI RUSSELL ALDEN, A.M.....Assistant Professor of History
HENRY CRAIG JONES, L.L.B.....Assistant Professor of Law

Associates, Lecturers, Instructors, Demonstrators and Assistants.

JOHN BENJAMIN NICHOLS, M.D....Associate in Medicine and Dietetics
EDWARD EMORY MORSE, M.D.....Associate in Obstetrics
JULIAN MAYO CABELL, M.D.....Associate in Obstetrics
HARRY HAMPTON DONNALLY, A.M., M.D.....Associate in Medicine and Clinical Associate in Pediatrics
WILLIAM FRANCIS MATTINGLY SOWERS, A.B., M.D.....Associate in Surgery
GIDEON BROWN MILLER, M.D.....Associate in Gynecology
HENRY RANDALL ELLIOTT, M.D.....Associate in Physiology and Pharmacology
WILBUR R. BRANDENBURG, M.D.....Associate in Bacteriology and Pathology
EDGAR PASQUAL COPELAND, M.D.....Clinical Associate in Pediatrics
JOHN T. KELLEY, M.D.....Clinical Associate in Obstetrics
WALTER ASHBY FRANKLAND, M.D.....Clinical Associate in Medicine
J. LEWIS RIGGLES, M.D.....Associate in Anatomy and Gynecology
HENRY JAMES NICHOLS, M.D..Associate in Bacteriology and Pathology
JOHN SWEYN NEATE, M.D....Associate in Pathology and Bacteriology
WALTER WATKINS WILKINSON, M.D.....Associate in Medicine
FRANK LEECH, M.D.....Clinical Associate in Pediatrics
OSCAR PHELPS AUSTIN.....Lecturer on Commercial Geography
FREDERICK EUGENE FOWLE, JR., S.B.....Lecturer on Astro-Physics
WILLIAM HAMILTON, Ph.D.....Lecturer on History
WILLARD STANTON SMALL, Ph.D.....Lecturer on Education
STEPHEN ELLIOTT KRAMER, B.S., A.M.....Lecturer on Education
JOHN BALL OSBORNE, M.A.....Lecturer on Trade Relations and Consular Service
PAUL CHARLTON, A.B.....Lecturer on Colonial Administration
JOHN LEE COULTER, M.A.....Lecturer on Agricultural Economics

FREDERICK WARREN GROVER, Ph.D.....Lecturer on Electricity
EDWIN WILEY, Ph.D.....Lecturer on English
FENTON BRADFORD, D.D.S.....Lecturer on Dental Materia Medica and Therapeutics
HERMON ARDELL FORDYCE, D.D.S.....Lecturer on Oral Prophylaxis
JESSE E. POPE, Ph.D.....Lecturer on Agricultural Economics
CHARLES OSCAR PAULLIN, Ph.D.....Lecturer on Naval History
WALTER HIBBARD MERRILL, M.D.....Instructor in Electro-Therapeutics
OSCAR ADDISON MACK MCKIMMIE, M.D.....Instructor in Laryngology and Otology
HOBART SOUTHWORTH DYE, M.D.....Instructor in Laryngology and Otology
TRUMAN ABBE, M.D.....Instructor in Genito-Urinary Surgery
JOSEPH LAWN THOMPSON, M.D.....Instructor in Surgery
ALFRED GEISES BUHRMAN.....Clerk of the Moot Court
GEORGE MORTON CHURCHILL, A.M.....Instructor in History
VIRGIL B. JACKSON, M.D.....Instructor in Gynecology
EDMUND THOMAS MURDAUGH FRANKLIN, M.D....Instructor in Surgery
WILLIAM J. FRENCH, M.D.....Instructor in Pediatrics
ARTHUR LEROY HUNT, M.D.....Instructor in Minor Surgery
CHARLES WILBUR HYDE, M.D.....Instructor in Medicine
JOHN WINSLOW TAYLOR, D.D.S...Instructor in Prosthetic Technics and Demonstrator in the Dental Infirmary
ADAM KEMBLE, M.D.....Instructor in Gynecology
SOTHORON KEY, M.D.....Instructor in Medicine
HOMER GIFFORD FULLER, M.D.....Instructor in Genito-Urinary Surgery and Venereal Diseases
CHARLES GARDNER SHOEMAKER, D.D.S.....Instructor in Operative Technics
HENRY CISSEL YOUNG, D.D.S.....Instructor in Prosthetic Technics and Demonstrator in the Dental Infirmary
HERBERT CORNWELL HOPKINS, D.D.S.....Instructor in Orthodontia
HAYNER HASKELL GORDON, Ph.D..Instructor in Mechanical Engineering
ROBERT WILBUR MORSE, S.B.....Instructor in Mechanical Engineering
CLINE CHIPMAN, M.D.....Instructor in Minor Surgery
GEORGE HENRY SCHWINN, M.D..Instructor in Psychiatry and Neurology
BENJAMIN RUSH LOGIE, M.D.....Instructor in Neurology
JOHN POTTS FILLEBROWN, M.D....Instructor in Physiology and Surgery
MARK RITTENHOUSE WOODWARD, E.E.....Instructor in Electrical Engineering
LESLIE CLEVELAND MCNEMAR, A.B.....Instructor in Political Science and International Law
DE WITT CLINTON POOLE, JR., M.Dip.....Instructor in Political Science
CHARLES AUGUSTUS SIMPSON, M.D.....Instructor in Dermatology

Albert Perkins Tibbets, M.D.....Instructor in Anatomy
Coursen Baxter Conklin, M.D.....Instructor in Medicine
Joseph Plass, A.M.....Instructor in History
Alexander Yelverton Peyton Garnett, M.D..Instructor in Obstetrics
Harry Hyland Kerr, M.D.....Instructor in Surgery
John Bradford Briggs, S.B., M.D.....Instructor in Pathology and Bacteriology
Milton Hahn, M.D.....Instructor in Pediatrics
Harry Grant Hodgkins, A.B.....Instructor in Mathematics
William Johnston Mallory, M.D.....Instructor in Medicine
Marion Edwyn Harrison, D.D.S.....Demonstrator in the Dental Infirmary
Caesare Louis Constantini, D.D.S.....In Charge of Clinical Instruction in Dentistry
Arthur Durdan Weakley, D.D.S.....Clinical Instructor in Dentistry
Thomas Locke Rust, D.D.S.....Clinical Instructor in Dentistry
George Bertram Roper Macdonald, D.D.S.....Clinical Instructor in Dentistry
William Carl Killinger, D.D.S.....Clinical Instructor in Orthodontia
Mark Florus Finley, D.D.S.....Clinical Instructor in Orthodontia
Alexander Dunnington Cobey, D.D.S.....Clinical Instructor in Non-Cohesive Gold
George Miller Sharp, D.D.S.....Clinical Instructor in Special Crown
Z. Wilbur Alderman, D.D.S.....Clinical Instructor in Electro-Therapeutics
Robert Edwin Layton, D.D.S.....Clinical Instructor in Dentistry
Melville Palmer Eslin, D.D.S.....Demonstrator in the Dental Infirmary
James Norris Robinson, D.D.S.....Demonstrator in the Dental Infirmary
Charles Clark Ammerman, M.D.....Assistant in Ophthalmology to the Dispensary
Julia Theckla Macmillan, M.S.....Assistant in Zoölogy

EDUCATIONAL ORGANIZATION.

The University embraces:

THE DEPARTMENT OF ARTS AND SCIENCES.

The School of Graduate Studies.
The College of Arts and Sciences.
The College of Engineering and Mechanic Arts.
The College of the Political Sciences.
The Teachers College.

THE PROFESSIONAL DEPARTMENTS.

The Department of Law.
The Department of Medicine.
The Department of Dentistry.

THE ASSOCIATED COLLEGES.

National College of Pharmacy.
The College of Veterinary Medicine.

ANNUAL COMMENCEMENT.

The Annual Commencement is held on the Wednesday following the Wednesday nearest the first day of June. Students who have satisfied the requirements for degrees subsequent to the June Commencement may be awarded such degrees privately in October or February.

THE UNIVERSITY LIBRARY

The University Library comprehends (1) the Library of the Department of Arts and Sciences, (2) the Law Library, (3) the Medical Library, and (4) the Library of the College of the Political Sciences. It contains over 43,700 volumes.

In addition to its general collections the Library of the Department of Arts and Sciences contains the library of the late Professor Richard Heinzel, of the University of Vienna, containing 7,200 books and pamphlets in Germanic philology and literature, and cognate branches; the library of the late Professor Curt Wachsmuth, of the University of Leipzig, containing 7,900 books and pamphlets in Greek and Roman literature, archæology, and history; and the divisional collections in engineering and mechanic arts and in education. It is open from 9 a. m. to 6.30 p. m.

The Law Library, containing 5,500 volumes, is open from 9 a. m. to 10 p. m.

The Medical Library, containing 4,000 volumes, is open from 9 a.m. to 10.30 p. m.

The Library of the College of the Political Sciences, containing 4,000 volumes in political history, international law, and the social sciences, is open from 9 a. m. to 10 p. m.

PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS.

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.
5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."

PART II.

DEPARTMENTS OF THE UNIVERSITY.

Departments of the University.

DEPARTMENT OF ARTS AND SCIENCES.

Charles Herbert Stockton, LL.D.....President of the University
Theodore Nicholas Gill, M.D., Ph.D., LL.D...Professor of Zoölogy, Emeritus
Howard Lincoln Hodgkins, Ph.D....Professor of Mathematics, and Dean
Hermann Schoenfeld, Ph.D., LL.D.....Professor of German
Charles Edward Munroe, Ph.D....Professor of Chemistry, and Dean
George Perkins Merrill, Ph.D..Professor of Geology and Mineralogy
Frank Wigglesworth Clarke, Sc.D..Professor of Mineral Chemistry
Harvey Washington Wiley, M.D., Ph.D., LL.D.....Professor of Agricultural Chemistry
William Allen Wilbur, A.M.....Professor of English, and Dean
Charles Clinton Swisher, Ph.D., LL.D.....Professor of History
Paul Bartsch, Ph.D.....Professor of Zoölogy
Mitchell Carroll, Ph.D..Professor of Greek and the History of Art
George Neely Henning, A.M.....Professor of Romance Languages
Charles William August Veditz, LL.B., Ph.D.....Professor of Sociology
George Lansing Raymond, L.H.D.....Professor of Aesthetics
Williston Samuel Hough, Ph.M..Professor of Philosophy, and Dean
George Miller Sternberg, M.D., LL.D., Professor of Preventive Medicine
Asaph Hall, Jr., Ph.D.....Professor of Astronomy
Albert Mann, A.M., Ph.D.....Professor of Botany
Henry Parker Willis, Ph.D....Professor of Economics and Finance, and Dean
Charles Sidney Smith, Ph.D.....Professor of Greek and Latin
Frederick Fuller Russell, M.D.....Professor of Pathology and Bacteriology
Thomas Malcolm Price, Ph.D..Professor of Physiological Chemistry
William Carl Ruediger, Ph.D..Professor of Educational Psychology
Alfred Francis William Schmidt, A.M..Professor of German, and Librarian
Willis Luther Moore, Sc.D., LL.D.....Professor of Practical Meteorology
William Jackson Humphreys, C.E., Ph.D.....Professor of Meteorological Physics

CHARLES NOBLE GREGORY, A.M., LL.D.....Professor of Law
NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry
†PHILANDER BETTS, E.E.....Assistant Professor of Electrical Engineering
EDWIN ALLSTON HILL, Ph.D.....Assistant Professor of Chemistry
RAY SMITH BASSLER, Ph.D.....Assistant Professor of Geology
†DE WITT C. CROISSANT, A.B.....Assistant Professor of English
PERLEY GILMAN NUTTING, Ph.D.....Assistant Professor of Physics
EDWIN VIVIAN DUNSTAN, C.E.....Assistant Professor of Civil Engineering
OSCAR ALEXANDER MECHLIN, C.E.....Assistant Professor of Civil Engineering
JOHN WILMER LATIMER, LL.B.....Assistant Professor of Law
OTIS DOW SWETT, M.S., LL.M.....Assistant Professor of Chemistry
CHARLES WARD MORTIMER, B.S., M.E.....Assistant Professor of Electrical Engineering
FRANK CHARLES STARR, S.B...Assistant Professor of Civil Engineering
BLAINE FREE MOORE, A.B.....Assistant Professor of Political Science
HIRAM COLVER MCNEIL, Ph.D.....Assistant Professor of Physical Chemistry
ROBERT RUSS KERN, A.B.....Assistant Professor of Economics and Sociology
LEVI RUSSELL ALDEN, A.M.....Assistant Professor of History
OSCAR PHELPS AUSTIN.....Lecturer on Commercial Geography
FREDERICK EUGENE FOWLE, JR., S.B.....Lecturer on Astro-Physics
WILLIAM HAMILTON, Ph.D.....Lecturer on History
WILLIAM STANTON SMALL, Ph.D.....Lecturer on Education
STEPHEN ELLIOTT KRAMER, B.S., A.M.....Lecturer on Education
JOHN BALL OSBORNE, M.A.....Lecturer on the Consular Service
PAUL CHARLTON, A.B.....Lecturer on Colonial Administration
JOHN LEE COULTER, M.A.....Lecturer on Agricultural Economics
FREDERICK WARREN GROVER, Ph.D.....Lecturer on Electricity
EDWIN WILEY, Ph.D.....Lecturer on English
JESSE E. POPE, Ph.D.....Lecturer on Agricultural Economics
CHARLES OSCAR PAULLIN, Ph.D.....Lecturer on Naval History
GEORGE MORTON CHURCHILL, A.M.....Instructor in History
HAYNER HASKELL GORDON, Ph.D.....Instructor in Mechanical Engineering
ROBERT WILBUR MORSE, S.B....Instructor in Mechanical Engineering
MARK RITTENHOUSE WOODWARD, E.E.....Instructor in Electrical Engineering
LESLIE CLEVELAND MCNEMAR, A.B..Instructor in Political Science and International Law
HARRY GRANT HODGKINS, A.B.....Instructor in Mathematics

† On leave of absence.

De Witt Clinton Poole, M.Dip.....Instructor in Political Science
Joseph Plass, A.M.....Instructor in History
Julia Thecla Macmillan, S.M.....Assistant in Zoölogy

Faculty of School of Graduate Studies.

President Stockton, Dean Munroe, Professors Hodgkins, Schoenfeld, Gill, Clarke, Wiley, Merrill, Swisher, Wilbur, Henning, Bartsch, Veditz, Raymond, Hough, Carroll, Sternberg, Hall, Willis, Mann, Smith, Ruediger, Schmidt, Moore, Humphreys, Price; Assistant Professors Hopkins, Hill, Dunstan, Mechlin, Nutting, Bassler, Croissant, Mortimer, McNeil, Alden, Kern.

Faculty of College of Arts and Sciences.

President Stockton, Dean Wilbur, Professors Hodgkins, Schoenfeld, Munroe, Merrill, Swisher, Bartsch, Henning, Hough, Willis, Smith, Schmidt; Assistant Professors Bassler, Swett, Kern, Moore, Mr. Woodward.

Faculty of College of Engineering and Mechanic Arts.

President Stockton, Dean Hodgkins, Professors Schoenfeld, Munroe, Merrill, Wilbur, Henning, Schmidt, Assistant Professors Dunstan, Mechlin, Swett, Starr, Mortimer, Latimer; Messrs. Gordon, Morse, Woodward.

Faculty of College of the Political Sciences.

President Stockton, Dean Willis, Professors Swisher, Gregory, Hodgkins, Schoenfeld, Munroe, Wilbur, Henning, Hough, Smith, Veditz; Assistant Professors Moore, Latimer, Kern; Messrs. McNemar, Poole, Churchill, Osborne, Charlton, Austin, Hamilton, Coulter, Pope, Paullin.

Faculty of Teachers College.

President Stockton, Dean Hough, Professors Hodgkins, Wilbur, Swisher, Bartsch, Smith, Ruediger, Schmidt; Assistant Professors Moore, Kern; Messrs. Small, Kramer.

SCHOOL OF GRADUATE STUDIES.

HIGHER DEGREES.

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A.M.), Master of Science (M.S.), Civil Engineer (C.E.), Electrical Engineer (E.E.), Mechanical Engineer (M.E.), and Doctor of Philosophy (Ph.D.).

ADMISSION.

Candidates for admission to courses for higher degrees must present the diplomas they hold, or certificates that they have received such diplomas, to the Secretary of the University, and obtain from him application blanks. When properly filled and signed, these applications are to be submitted to the Dean of the Faculty of Graduate Studies, together with catalogues of the institutions from which the candidates hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE.

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the courses of study pursued must have been such as to qualify the candidate for pursuing the subjects chosen for the Master's degree. In seeking admission the applicant must state whether he desires to obtain the Specialist degree or the Liberal Culture degree.

The Specialist degree is designed for students who propose to proceed toward the Doctor of Philosophy degree. Such candidates are required to complete one major and two minor subjects selected from properly correlated University subjects approved by the Faculty upon recommendation of the professors in charge and to present a satisfactory dissertation. Only one of the minor topics may be selected from the University subject which includes his major topic. Work for which this degree has been awarded may be credited as one year of work toward the Doctor of Philosophy degree, provided that it be in the same field of work.

The Liberal Culture degree is designed for students who do not intend to specialize in their work. Such candidates are required to complete three full courses of studies, of two or three hours each, distributed among three University subjects, not more than six hours of which shall be given to any one subject. These subjects must have the approval of the Faculty on the recommendation of the professors in charge. The candidate must also present a dissertation in the field to which his major subject belongs.

A candidate for a Master's degree must pass at least one full year in residence and study at this University, and no work done by him for the Bachelor's degree shall be counted again for a higher degree.

HIGHER DEGREES IN ENGINEERING.

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree sought.

A candidate for a degree in Engineering shall pass at least one full year of residence and study at this University, sustain satisfactory examinations on the studies pursued, and present an acceptable thesis, together with a bibliography. Three full courses is the minimum required as constituting a full year's work. The courses chosen must be passed upon by the Faculty of Graduate Studies and have the approval of the professors under whom they are to be taken.

DOCTOR'S DEGREES.

The degree of Doctor of Philosophy is conferred upon a student who has pursued specialized courses in University Subjects; engaged in original research in certain of the various departments of law, letters, or science under university auspices, for a period of not less than three years; has submitted an acceptable thesis, and has met all the requirements prescribed. The degree is given for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for the Doctor's degree he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good stand-

ing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. The applicant may be credited with graduate work done at other universities, provided such work is shown to be of grade similar to that required here, but one year, preferably the last, must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

The candidate for the Doctor's degree shall offer three topics from the University Subjects—one major and two collateral minor studies—the combination to be approved by the Faculty of Graduate Studies. These must be pursued under the guidance of a committee consisting of the professors in charge of the University Subjects in which the studies are pursued, with the professor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics, but in general the major topic should be pursued during the whole time devoted to graduate work, and each minor topic during at least one year. The candidate shall pass satisfactory examinations upon the three subjects selected. He must satisfy the Faculty that he can read understandingly in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major subject and he must present a dissertation upon some topic approved by the professor in charge of his major subject, which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography.

EXAMINATIONS.

Candidates must pass written examinations upon all their topics. The examinations upon the minor topics may be taken at the close of the respective years in which these topics are completed, or later, at the discretion of the examiner. The final written examination on the major topic shall cover the candidate's entire university work, and shall be given when the professor of that subject is satisfied that the student has taken sufficient work to warrant such an examination being taken.

Every candidate for a Doctor's degree must pass an oral examination. This will consist (*a*) of a defence of his dissertation in the presence of the Faculty of Graduate Studies, or of so many of its members as may desire or may be designated by the Faculty to attend, and such other specialists as it may invite, and (*b*) of an examination upon the major and minor topics by the professors in charge of those topics. The oral examination will not be confined to the dissertation nor to courses of study pursued at this University, but the candidate is expected to

show a satisfactory knowledge of his major subject as a whole, and a general acquaintance with the broader field of knowledge of which this subject forms a part. If a student has satisfactorily passed his final written examinations, he may be permitted to complete his dissertation away from the University and to postpone the taking of his oral examination until he has thus completed his dissertation.

The subjects from which the candidate's selection may be made, as the Faculty may determine in each case, are as follows:

Agriculture, Applied Mathematics, Architecture, Astronomy, Astro-Physics, Bacteriology, Botany, Chemistry, Classical Archæology, Economics, Education, Civil Engineering, Electrical Engineering, Hydraulic Engineering, Mechanical Engineering, English, Ethics, Geology and Mineralogy, Germanic Languages and Literature, Greek Language and Literature, Histology and Embryology, History, International Law and Diplomacy, Latin Language and Literature, Law, Mathematics, Meteorology, Pathology, Philosophy, Physics, Physiology and Pharmacology, Political Sciences, Preventive Medicine, Psychology, Romance Language and Literature, Semitic Languages and Literature, Sociology, Zoölogy.

DEGREE OF DOCTOR OF PHILOSOPHY.

A candidate for this degree may, with the approval of the Faculty upon recommendation of the professors in charge, select his topics from properly correlated University Subjects, but only one of the minor topics may be in the subject which includes the major topic. He must by the tests applied prove his ability to do research work and his thorough acquaintance with the literature of the subject of which his dissertation treats.

REGULATIONS REGARDING DISSERTATIONS.

Dissertations must be presented to the Dean not later than May 1 for graduation in June. They must be typewritten on official dissertation paper, which may be obtained from the Treasurer of the University. The dissertation will be presented by the Dean to the Faculty, and by it referred to a committee for examination as to its merits. After their acceptance, dissertations, with their accompanying drawings, are the property of the University, and must be deposited in the University archives, but the authors of them are permitted to make copies. The candidate shall arrange, to the satisfaction of the Faculty, to print his dissertation within one year after the degree is granted, under the supervision of the professor in charge of his major subject, and shall present one hundred copies to the University, to be distributed among institutions of learning.

DOCTORATE DISPUTATIONS.

A Doctorate Disputation was held publicly in University Hall, May 22, 1911. The theses that were successfully defended, the candidates, and the members of the boards of experts were as follows:

Thesis: A Study of the Soils of the United States. By GEORGE NELSON COFFEY, Ph.B., 1900, University of North Carolina; M.S., 1908, The George Washington University. Before FRANK K. CAMERON, Ph.D.; J. A. BONSTEEL, Ph.D.; GEORGE H. FAILYER, M.S. Professor GEORGE P. MERRILL, Ph.D., presiding.

Thesis: An Investigation of the Action of the Crystal Rectifying Detectors. By HAYNER HASKELL GORDON, B.S., in E.E., 1908; E.E., 1909, The George Washington University. Before Professor LOUIS W. AUSTIN, Ph.D.; FREDERICK W. GROVER, Ph.D.; Assistant Professor CHARLES W. MORTIMER, B.S., M.E.; MARK R. WOODWARD, E.E. Professor H. L. HODGKINS, Ph.D., presiding.

Thesis: Experiments on Habit Formation in Dementia Præcox. By GRACE HELEN KENT, A.B., 1902; A.M., 1904, University of Iowa. Before Professor WILLIAM A. WHITE, M.D.; Professor WILLISTON S. HOUGH, Ph.M.; Professor WILLIAM C. RUEDIGER, Ph.D. Professor SHEPHERD IVORY FRANZ, Ph.D., presiding.

Thesis: A Bacteriological Study of Ham Souring. By CHARLES NEIL MCBRYDE, B.S., 1891, University of South Carolina; M.S., 1893, The Virginia Polytechnic Institute; M.D., 1897, The Johns Hopkins University. Before HENRY G. BEYER, M.D., Medical Director U. S. Navy; CHARLES F. CRAIG, M.D., Captain, Medical Corps, U. S. Army; GEORGE WHITFIELD STILES, M.D., Ph.D. Professor GEORGE M. STERNBERG, M.D., LL.D., Surgeon General U. S. A. (retired), presiding.

Thesis: Shakespeare's Treatment of the Supernatural in the Light of Contemporary Thought and Opinion. By EDWIN WILEY, B.S., 1891; A.B., 1898; A.M., 1898, University of Tennessee. Before Professor GEORGE L. RAYMOND, L.H.D.; Rabbi ABRAM SIMON, Ph.D.; Professor HENRY PARKER WILLIS, Ph.D. Professor WILLIAM ALLEN WILBUR, A.M., presiding.

COLLEGE OF ARTS AND SCIENCES.

The session of 1911-12 begins Wednesday, September 27, 1911.
The College of Arts and Sciences is open to men and women.

ADMISSION.

Every applicant for admission is required to present a testimonial of good character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificates of the College Entrance Examination Board will be accepted.

The requirement for admission is a four-year high-school course, or its equivalent, amounting to fifteen "units."

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

These fifteen units must include English, 3 units; Mathematics, 2 units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units. The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

ENTRANCE EXAMINATIONS.

The regular examinations for admission are held in May.
The following is the schedule:

Tuesday, May 21, 1912.

Elementary Latin	9.00–11.00
Plane Geometry	11.00– 1.00
Physics	2.00– 4.00
Greek	2.00– 5.00

Wednesday, May 22.

Elementary Algebra	9.00–11.00
Elementary French	11.00– 1.00
Elementary German	2.00– 4.00
Ancient History	4.00– 6.00

Thursday, May 23.

Plane Trigonometry	9.00–11.00
Advanced French, Advanced German	11.00– 1.00
English	2.00– 5.00

Friday, May 24.

Advanced Algebra	9.00–11.00
Solid Geometry	11.00– 1.00
Chemistry; Advanced Latin	2.00– 4.00

Subjects offered for admission, but not named in the schedule of examinations, will be arranged for as occasion arises.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

Candidates from the Washington high schools for the Kendall and the University Scholarships will be examined on only nine units. These nine units upon which the examination will be given are the following: the specified subjects—English (three units), Mathematics (two units), and one other language (two units); the remaining two units may be in language, history, mathematics, physics, chemistry, biology—as the candidate shall elect. The remainder of the fifteen units must be certified from the high schools.

DEFINITION OF REQUIREMENTS.

ENGLISH.

(Three units.)

The requirements in English are those recommended by the Conference on Uniform Entrance Requirements in English, which met February 22, 1909. These recommendations are as follows:

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation.

English Grammar and Composition.

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school,

and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, paragraphs, and the different kinds of whole composition, including letter-writing, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise narration, description, and easy exposition and argument based upon simple outlines. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

Literature.

The second object is sought by means of two lists of books, headed, respectively, *reading* and *study*, from which may be framed a progressive course in literature covering four years. In connection with both lists the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages, both in verse and in prose. As an aid to literary appreciation he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

1. *Reading.*—The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to large freedom of choice, the books provided for reading are arranged in the following groups, from which at least ten units* are to be selected, two from each group:

(*a*) The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the Odyssey, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII; the Iliad, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; Virgil's Æneid. The Odyssey, Iliad, and Æneid should be read in English translations of recognized literary excellence.

For any unit of this group a unit from any other group may be substituted.

* Each unit is set off by semicolons.

(*b*) Shakespeare's Merchant of Venice; Midsummer Night's Dream; As You Like It; Twelfth Night; Henry the Fifth; Julius Cæsar.

(*c*) Defoe's Robinson Crusoe, Part I; Goldsmith's Vicar of Wakefield; either Scott's Ivanhoe or Scott's Quentin Durward; Hawthorne's House of the Seven Gables; either Dickens's David Copperfield or Dickens's Tale of Two Cities; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; George Eliot's Silas Marner; Stevenson's Treasure Island.

(*d*) Bunyan's Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography (condensed); Irving's Sketch Book; Macaulay's Essays on Lord Clive and Warren Hastings; Thackeray's English Humourists; Selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate; Parkman's Oregon Trail; either Thoreau's Walden or Huxley's Autobiography and selections from Lay Sermons, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; Stevenson's Inland Voyage and Travels with a Donkey.

(*e*) Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns; Gray's Elegy in a Country Churchyard and Goldsmith's Deserted Village; Coleridge's Ancient Mariner and Lowell's Vision of Sir Launfal; Scott's Lady of the Lake; Byron's Childe Harold, Canto IV, and Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Poe's Raven, Longfellow's Courtship of Miles Standish, and Whittier's Snow Bound; Macaulay's Lays of Ancient Rome and Arnold's Sohrab and Rustum; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City.

2. *Study.*—This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. For this close reading are provided a play, a group of poems, an oration, and an essay, as follows:

Shakespeare's Macbeth; Milton's L'Allegro, Il Penseroso, and Comus; either Burke's Speech on Conciliation with America or both Washington's Farewell Address and Webster's First Bunker Hill Oration; either Macaulay's Life of Johnson or Carlyle's Essay on Burns.

Examination.

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

The first part of the examination will be upon ten units chosen, in accordance with the plan described earlier, from the lists headed *reading;* and it may include also questions upon grammar and the simpler principles of rhetoric, and a short composition upon some topic drawn from the student's general knowledge or experience. On the books prescribed for reading, the form of the examination will usually be the writing of short paragraphs on several topics which the candidate may choose out of a considerable number. These topics will involve such knowledge and appreciation of plot, character-development, and other qualities of style and treatment as may be fairly expected of boys and girls. In grammar and rhetoric, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors.

The second part of the examination will include composition and those books comprised in the list headed *study.* The test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books prescribed for *study,* from the candidate's other studies, and from his personal knowledge and experiences quite apart from reading. For this purpose the examiner will provide several subjects, perhaps five or six, from which the candidate may make his own selections. The test on the books prescribed for study will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

LATIN.

Elementary (Two units).

a. i. Latin Grammar: The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verb; structure of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive.

ii. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based on Cæsar.

b. Cæsar: Any four books of the Gallic War, preferably the first four.

Advanced (Two units).

a. Cicero: Any six orations from the following list, but preferably the first six mentioned:

The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

b. Virgil: The first six books of the Æneid.

c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.

d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

GREEK.

Elementary (Two units).

a. i. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.

ii. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions.

The examination in grammar and prose composition will be based on the first two books of Xenophon's Anabasis.

b. Xenophon: The first four books of the Anabasis.

Advanced (One unit).

a. Homer: The first three books of the Iliad (omitting II, 494, to end).

b. Sight Translation, based on prose of no greater difficulty than Xenophon's Anabasis.

FRENCH.

Elementary (Two units). Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history. Candidates must have had a two-years' course of five periods per week.

Advanced (Two units). Candidates in Advanced French must have partly translated, partly read, in addition to the requirements for Ele-

mentary French, at least 1,000 pages of difficult French of several different authors, including history, fiction, drama, and poetry. Candidates must have had a four-years' course of five periods per week.

Fraser and Squair's French Grammar or Grandgent's Essentials of French Grammar is recommended.

SPANISH.

(Two units.)

Candidates in Spanish must have a good knowledge of grammar, including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-years' course of five periods per week.

GERMAN.

Elementary (Two units). Candidates in Elementary German must have had a two-years' course of five periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of an elementary German grammar is requisite, to be tested by the translation into German of some fifteen sentences. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

Advanced (Two units). Candidates in Advanced German must have had a four-years' course of five periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Lessing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

HISTORY.

In this subject special importance is attached to preparation in geography.

Ancient (One unit).

a. Greek History, through the Roman Conquest; as much as is contained in Myer's, Bottsford's, or West's History of Greece.

b. Roman History; as much as is contained in Allen's, Bottsford's, or West's History of the Roman People.

Mediæval and Modern European History (One unit). As much as is contained in Myer's History of Mediæval and Modern Europe.

English History (One unit). As much as is contained in Larned's or Cheyney's History of England.

American History with the Elements of Civil Government (One unit). As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

MATHEMATICS.

Elementary Algebra (One unit).

i. Algebra to Quadratics:

The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

ii. Quadratics, etc.:

Quadratic equations and equations containing one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binominal theorem for positive integral exponents.

Advanced Algebra (One-half unit).

i. Progressions, etc.:

The progressions, the elementary treatment of permutations and combinations, and the use of four and five place tables and logarithms.

ii. Series, etc.:

Undetermined coefficients, the elementary treatment of infinite series, the binominal theorem for fractional and negative exponents, and the theory of logarithms.

iii. Theory of equations:

Determinants and the elements of the theory of equations, including Horner's method for solving numerical equations.

Plane Geometry (One unit).

General text propositions, including the solution of simple original exercises and numerical problems.

Solid Geometry (One-half unit).

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres; of spherical triangles and the measurement of surfaces and solids.

Plane Trigonometry (One-half unit).

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulas, theory of logarithms and use of tables, solution of right and oblique plane triangles.

PHYSICS.

(One unit.)

It is recommended that the candidate's preparation should include:

a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.

b. Instruction by lecture-table demonstrations.

c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note-book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

CHEMISTRY.

(One unit.)

The candidate's preparation in chemistry should include:

a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board. The laboratory note-book must be submitted for inspection.

b. Instruction by lecture-table demonstrations.

c. The study of at least one modern text-book.

Requirements.—The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur,* phosphorus, silicon, potas-

sium, *sodium*, calcium, magnesium, *zinc*, copper, mercury, silver, aluminum, *lead*, tin, *iron*, manganese, chromium.

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, symbols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements, solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

ADDITIONAL SUBJECTS.

Certificates will be accepted in botany, zoölogy, physiology, physiography, political economy, drawing, music, and other accrediated subjects in secondary schools.

Manual-training High School Subjects.

Technical subjects in manual-training high schools, or schools of similar grade, when duly certified, may be credited as follows:

Shopwork (not exceeding two units), domestic science and domestic art (not exceeding two units).

Business High School Subjects.

Commercial subjects in business high schools or schools of similar grade, when duly certified, may be credited as follows:

Accounting and Finance. (One unit.)
Bookkeeping. (Two units.)
Business Organization. (One unit.)
Commercial law. (One unit.)
Government and Industrial Problems. (One-half unit.)
Commercial History. (One-half unit.)
Commercial and Physical Geography. (One-half unit.)

ADMISSION TO ADVANCED STANDING.

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

ADMISSION TO SPECIAL COURSES.

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

REQUIREMENTS FOR DEGREES.

The undergraduate degrees offered by the College of Arts and Sciences are Bachelor of Arts and Bachelor of Science in Chemistry. To be recommended for either of these degrees, the student must be registered for at least one academic year, must satisfy the admission requirements, and must complete at least sixty "hours" of undergraduate courses.

An "hour" of credit is one hour of recitation or lecture work a week or one laboratory period a week for one academic year. Except in the last year of the course no student taking less than six hours of work will be registered as a regular student. But no time limit for the course is prescribed and the degree is given when the total of prescribed and elective courses is completed.

One grade of special distinction is recognized in awarding the bachelor's degree. It is shown by inserting the words "With Distinction" on the diploma after the name of the degree. It is awarded under the following conditions:

"That the names of all students who have received a mark of at least B (90 per cent) on courses representing at least sixty (60) per cent of all hours taken by them be submitted by the Dean to the Faculty of the Department in which the students shall be studying for a degree, after the completion of all final examinations in such students' final year of study for their degree;

"That the Faculty, after separate consideration of each individual case, shall, if it see fit, recommend the awarding of the degree 'With Distinction' to students who shall have fulfilled the conditions above specified."

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study including a group of prescribed subjects, and aggregating at least sixty "hours."

There are five groups of prescribed subjects for the first two years of the college course. Every candidate for the degree of Bachelor of Arts elects one of these groups of prescribed subjects, and thereafter he is not permitted to change to another group except on condition that he fulfill the requirements of the group to which he changes.

The studies of the last two years of the course in the College of Arts and Sciences are elective, subject only to such administrative supervision as will insure the general consistency and the liberal character of the courses selected.

The scope of the five groups of prescribed subjects is a provision alike for the diversity in the subjects of the secondary school curriculum leading to a college course, and the needs of the various graduate and professional courses of study in the University for which the college course is a preparation.

Group I emphasizes Latin and Greek studies, and it would naturally be taken by students whose preparatory work has included four years of Latin. Group II emphasizes the Modern Languages, affording to students whose preparation has not included Latin the humanistic influences of the literatures of the Modern Languages. Group III emphasizes Mathematics and the Natural Sciences, and would naturally be selected by the student whose college preparation has been scientific rather than literary. Group IV consists of such studies as would constitute needed preparation for the Department of Law. Group V consists of the subjects that should be taken by those intending to enter the Department of Medicine. The five groups are as follows:

(NOTE.—Whenever in the following groups French or German is taken, if it is elementary, the same language shall be continued the succeeding year.)

GROUP I.

	Hours.
English	6
History	3
Languages*	9
Latin	6
Mathematics	3
Psychology and Logic	3
	30

* To be elected from Greek, French, German.

Group II.

	Hours.
English	6
French	3
German	6
History	6
Mathematics or Science	3
Psychology and Logic	3
Romance Language	3
	30

Group III.

	Hours.
English	3
History	3
Mathematics	6
Modern Languages	6
Psychology and Logic	3
Science	5
	26

Group IV.

	Hours.
Economics	3
English	6
History	7
Mathematics	3
Modern Languages or Latin	6
Science	3
	28

Group V.

	Hours.
English	3
German	3
History	3
Mathematics	3
Psychology and Logic	3
Sciences:	
Chemistry, 1, 3, 23	7
Physics, 1, 2, or 2, 3	5
Biology	5
	32

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN CHEMISTRY.

Freshman Year.

	Hours.		Hours.
Chemistry, 1, 2	5	French or German	3
English, 1 or 2	3	Geology, 1	2
Mathematics, 3 or 6	3		

Sophomore Year.

Chemistry, 3, 20	5	Mathematics, 9 or 12	3
French or German	3	Physics, 1, 2	5

Junior Year.

Chemistry, 4, 21, 23	6	Mathematics, 20 or 21	3
French or German	3	Electrical Engineering, 7	3

Senior Year.

Chemistry, 6, 24, 25, 27	9	Geology, 2	2
Economics or History	3		

COMBINED COURSES.

The regular courses in the College of Arts and Sciences are so correlated with courses in the professional departments that the degree of Bachelor of Arts and the professional degree in Law may be obtained in six years, and in Medicine in seven years.

SCHEDULE OF COURSES IN THE REQUIRED SUBJECTS FOR THE FIRST TWO YEARS.

	MON.	TUES.	WED.	THURS.	FRI.	SAT.
9:00	Math. 3	English 3	Math. 3	English 3	Math. 3	English 3
10:00	Math. 9 Psychol. 1*a* Logic 2*a*	English 1 Physics 2 Spanish 1	Math. 9 Psychol. 1*a* Logic 2*a*	English 1 Physics 2 Spanish 1	Math. 9 Psychol. 1*a* Logic 2*a*	English 1 Spanish 1
11:00	Econ. 20 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 20 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 20 French 1 German 3 Greek 2	German 1
1:30	Graphics 1 Latin 2 Physics 3	Chem. 2	Graphics 1 Latin 2 Physics 3	Chem. 2	Latin 2 Physics 3	
2:30	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 Hist. 26	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 Hist. 26	Greek 1 Hist. 1, 2	
3:30	Graphics 1 Hist. 3, 4 Latin 1	Chem. 2	Graphics 1 Hist. 3, 4 Latin 1	Chem. 2	Hist. 3, 4 Latin 1	
4:50	English 2 Physics 1 Psychol. 1*b* Logic 2*b*	Chem. 1 French 4 German 2 Hist. 32	English 2 Physics 1 Psychol. 1*b* Logic 2*b*	Chem. 1 French 4 German 2 Hist. 32	English 2 Physics 1 Psychol. 1*b* Logic 2*b*	Chem. 1 French 4 German 2
5:40	Econ. 20 English 4 Geology 2 Math. 12 Math. 4	French 2 Geology 1 German 4 Math. 6	Econ. 20 English 4 Math. 12 Math. 4	French 2 Geology 1 German 4 Math. 6	Econ. 20 English 4 Geology 2 Math. 12 Math. 4	French 2 German 4 Math. 6

PRIZES.

Only candidates for degrees may compete for these prizes.

STAUGHTON AND ELTON PRIZES.—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

RUGGLES PRIZES.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

DAVIS PRIZES.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

DAUGHTERS OF THE AMERICAN REVOLUTION PRIZES.—These prizes, founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediæval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

THE THOMAS F. WALSH PRIZE.—This prize, established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, consists of a gold medal awarded annually to that student of the graduating class who, having maintained a high standard in the regular classes of Mediæval, Modern European, English, and American History, shall produce the best essay upon a designated period of the History of Ireland.

E. K. CUTTER PRIZE.—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

THE FUNK AND WAGNALLS STANDARD DICTIONARY PRIZE.—The Funk and Wagnalls Company offers an unabridged copy of the latest edition of the Standard Dictionary of the English Language, to that member of the Freshman Class who passes the best examination in English Rhetoric. A special examination for this prize is given in May. The examination covers the work in English Rhetoric for the entire year.

WILLIE E. FITCH PRIZE.—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq., in memory of his son, consists of fifty dollars, which is awarded annually for the best examinations in Chemistry.

THE GARDINER G. HUBBARD MEMORIAL PRIZE.—This is a prize in American History established by Mrs. Gertrude M. Hubbard in memory of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that student of the graduating class who has during four years maintained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

COLONIAL HISTORY PRIZE.—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the Professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

JAMES MACBRIDE STERRETT, JR., PRIZE, founded by Professor James Macbride Sterrett in memory of his son, consits of a gold medal, annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject, and in the writing of an essay on an assigned topic.

PRIZE AWARDS 1910–11.

STAUGHTON PRIZE.....Helen Sellman Nicholson
Honorable Mention.....Alice Mary Richards
RUGGLES PRIZE.....Hilda Beale
DAVIS PRIZES:
First Prize.....Warren Jefferson Davis
Second Prize.....Kenneth Fuller Maxcy
Third Prize.....Irving Paul Taylor
DAUGHTERS OF THE AMERICAN REVOLUTION PRIZES. {..Ethel Marguerite Weller / Hilda Beale
THOMAS F. WALSH PRIZE.....Helen Sellman Nicholson
E. K. CUTTER PRIZE.....Helen Sellman Nicholson
FUNK AND WAGNALLS PRIZE.....Mattie Eiker
GARDINER G. HUBBARD MEMORIAL PRIZE.....Helen Sellman Nicholson
COLONIAL HISTORY PRIZE OF THE SOCIETY OF THE COLONIAL DAMES OF AMERICA.....Helen Summy

SCHOLARSHIPS.

Applications for scholarships should be filed with the Dean not later than September fifteenth. All scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only, but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term, or whose deportment is unsatisfactory, will be reported to the President's Council, and in the absence of extenuating circumstances the scholarship will be revoked. All designations to scholarships are awarded by the President's Council on the recommendation of the Dean.

Scholarships for Competition.

The University offers the following scholarships to be awarded on competitive examination given at the time of the May entrance ex-

aminations. Holders of these scholarships are expected to pursue a regular course in one of the colleges of the Department of Arts and Sciences. No scholarship is awarded to a candidate whose examination average is below 80 per cent.

KENDALL SCHOLARSHIP.—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that member of the graduating class of any of the Washington High Schools who attains the highest average in the entrance examinations. This scholarship continues throughout the undergraduate course, and the student holding it pays only the matriculation, library, laboratory, and graduation fees.

UNIVERSITY SCHOLARSHIPS.—The University offers also six scholarships, each continuing throughout the undergraduate course, to be awarded annually to members of the graduating classes of any of the Washington High Schools. The scholarships are divided, so far as the general averages will permit, among the several schools in proportion to the number of students in attendance upon each. Three scholarships are offered to young men and three to young women. These scholarships continue throughout the undergraduate course, and students holding them pay only the matriculation, library, laboratory, and graduation fees.

Scholarships for Assignment.

DAVIS SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

MARY LOWELL STONE SCHOLARSHIP.—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University.

MARIA M. CARTER SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

FARNHAM SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

WITHINGTON SCHOLARSHIP.—This scholarship was founded in 1830, by the New York Baptist Theological Seminary, to be known as the Withington scholarship. It has an annual stipend in tuition fees of sixty dollars.

WALKER SCHOLARSHIP.—This scholarship was founded in 1824 by William Walker, Esq., of Putnam County, Georgia. It carries an an-

nual stipend of one hundred dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

MOREHOUSE SCHOLARSHIP.—This scholarship was founded by Mr. A. Morehouse, of Washington, D. C., in 1861. It carries an annual stipend of sixty dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

MINISTERIAL AID.—The University authorizes the remission of a stated amount in tuition fees, to be called Ministerial Aid, which may be given to students, resident in the District of Columbia or its immediate vicinity, in the regular courses of the College of Arts and Sciences, preparing for the ministry and not yet ordained.

UNIVERSITY AID.—The University authorizes the remission of a stated amount in tuition fees, to be called University Aid, which may be given to students in regular courses in the undergraduate departments of arts and sciences, financially dependent on parents, who are residents of the District of Columbia or its immediate vicinity and whose circumstances warrant pecuniary assistance. Any student receiving University Aid may be called upon by the University for clerical or like work to the extent of not more than one hour a week for every ten dollars' worth of tuition remitted.

COLUMBIAN WOMEN LOAN FUND.

The Columbian Women have established a fund from which money is loaned to women students, preference being given to women who have already begun work in the University and who need assistance in continuing it. The administration of the fund remains with the Columbian Women.

DAVIS PRIZE SPEAKING.

The Davis Prize Speaking is held on the Tuesday after the Easter holidays. The Davis Prizes were founded by Hon. Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in cash or gold medals, of the value of $5, of $10, and of $15 annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College."

The award of these three prizes is determined by a public speaking contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of the College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the Faculty of the College.

ENOSINIAN SOCIETY.

The Enosinian Society, a literary association, to which any University student is eligible, meets regularly for the purpose of improvement in debate and composition.

This society had its beginning March 6, 1822, during the first session of Columbian College, when a number of students held a meeting "for the purpose of establishing a debating society."

RELIGIOUS WORK.

The student movement in Association work is represented by the Young Men's Christian Association of the University, which was organized in the fall of 1905. The Association plans and conducts religious work among the men of the University. The Association calendar includes Bible study clubs, a weekly chapel service, and occasional men's meetings.

Similar lines of religious work are conducted among the women students by the Young Women's Christian Association of the College.

A chapter of the Brotherhood of St. Andrew was organized March 10, 1910, and a charter has since been granted.

COLLEGE CHAPEL.

The College Chapel is held at 12 o'clock, noon, throughout the academic year.

The Dean of the College will confer with students as they may desire on questions concerning their welfare and will coöperate with them in all ways to make the college life one of personal helpfulness.

COLLEGE OF ENGINEERING AND MECHANIC ARTS.

The session of 1911–1912 begins Wednesday, September 27, 1911.

ADMISSION.

Every applicant for admission is required to present a testimonial of good character, and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools desiring coöperation with the University, that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificate of the College Entrance Examination Board will be accepted in so far as the subjects specified meet the requirements for admission.

The certificate of the Washington high schools covering all the requirements for admission admits students without examination to the courses of the Freshman year.

The certificates of all schools accredited to the University will be accepted in so far as they meet the requirements for admission.

The requirement for admission is a four-year high-school course, or its equivalent, amounting to fifteen "units." A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

Candidates for admission to the Freshman Class in the College of Engineering are required to present fifteen units for admission, distributed as follows:

	Units.
English	3
French or German	4
Plane and Solid Geometry	1½
Elementary and Advanced Algebra	1½
Plane Trigonometry	½
Chemistry	1
Physics	1
Electives	2½
	15

NOTE.—The modern language requirement may be satisfied by presenting four units in one language, or two units in French and two units in German. Students who present four units in one language will study the other language two years in College. Students who present two units in French and two units in German will study each language one year in College.

ADMISSION TO ADVANCED STANDING.

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

ADMISSION TO SPECIAL COURSES.

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

COURSES FOR A DEGREE.

Three courses of study are offered:

I. CIVIL ENGINEERING.
II. ELECTRICAL ENGINEERING.
III. MECHANICAL ENGINEERING.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, and in Mechanical Engineering, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington University are open to those who receive the above degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

REQUIREMENTS FOR A DEGREE.

The arrangement of the topics in each of the regular courses for a degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of University Subjects on pages 91–125, to which reference should be made for more complete description.

COMMON TO ALL COURSES.

Freshman Year.

Chemistry, 1, 7.
General Chemistry and Qualitative Analysis.
English, 1 or 2.
Rhetoric.
French or German.
Graphics, 1.
Mechanical and Freehand Drawing.
Mathematics, 9 or 12.
Trigonometry; Analytic Geometry.

CIVIL ENGINEERING COURSE.

Sophomore Year.

Civil Engineering, 1, 4.
Surveying; Materials of Construction.
French or German.
Graphics, 8, 10.
Descriptive Geometry; Topographic Drawing.
Mathematics, 20 or 21.
Calculus.
Physics, 1, 2.
General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 22.
Mechanics; Mechanics of Materials.
Chemistry, 6.
Metallurgy.
Civil Engineering, 2, 3, 8, 22.
Railroad Engineering; Highway Engineering; Practical Astronomy; Theory of Structures.
Electrical Engineering, 6.
Industrial Engineering.
Geology, 2.

Senior Year.

Applied Mathematics, 21.
Hydraulics.
Civil Engineering, 20, 21, 23, 24.
Masonry; Hydraulic Engineering; Theory of Structures; Sanitary Engineering.
Contracts and Business Law.

ELECTRICAL ENGINEERING COURSE.

Sophomore Year.

French or German.
Graphics, 2, 8.
 Advanced Mechanical Drawing; Descriptive Geometry.
Mathematics, 20 or 21.
 Calculus.
Mechanical Engineering, 1.
 Mechanism.
Physics, 1, 2.
 General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 22.
 Mechanics; Mechanics of Materials.
Chemistry, 6.
 Metallurgy.
Electrical Engineering, 1, 4, 5.
 Elementary Electricity and Electrical Engineering; Electrical Measurements; Electrical Engineering Laboratory.
Mechanical Engineering, 20, 21.
 Steam Engineering; Boilers.

Senior Year.

Applied Mathematics, 21.
 Hydraulics.
Civil Engineering, 5, 6.
 Surveying Instruments; Foundations.
Contracts and Business Law.
Electrical Engineering, 8, 21, 22, 23, 24, 26, 27.
 Electrical Designs; Alternating Currents; Electrical Distribution; Electrical Applications; Electrical Engineering, Laboratory; Electric Lighting; Electric Railways.
Mechanical Engineering, 10, 23.
 Engineering Laboratory; Hydraulic Machinery.

MECHANICAL ENGINEERING COURSE.

Sophomore Year.

French or German.
Graphics, 2, 8.
 Advanced Mechanical Drawing; Descriptive Geometry.
Mathematics, 20 or 21.
 Calculus.

Mechanical Engineering, 1.
Mechanism.
Physics, 1, 2.
General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 22.
Mechanics; Mechanics of Materials.
Civil Engineering, 22.
Theory of Structures.
Mechanical Engineering, 6, 9, 20, 21, 24, 28.
Engineering Drawing; Engineering Laboratory; Steam Engineering; Boilers; Cotton Machinery and Machine Tools; Industrial Management.

Senior Year.

Applied Mathematics, 21.
Hydraulics.
Chemistry, 6.
Metallurgy.
Civil Engineering, 5, 6.
Surveying Instruments; Foundations.
Contracts and Business Law.
Electrical Engineering, 7.
Dynamos and Motors.
Mechanical Engineering, 7, 10, 22, 23, 26, 27.
Machine Design; Engineering Laboratory; Gas Engines; Hydraulic Machinery; Dynamics of Machinery; Power Plant Design.

PRIZES.

Only candidates for degrees may compete for these prizes.

Ruggles Prizes.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best scholars in Mathematics.

Davis Prizes.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Members of the Senior Class are eligible to compete for these prizes.

James Macbride Sterrett, Jr., Prize, founded by Professor James Macbride Sterrett in memory of his son, consists of a gold medal,

annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject, and in the writing of an essay on an assigned topic.

MUTH PRIZE.—Geo. F. Muth & Co. offer a set of drawing instruments to the student taking Advanced Mechanical Drawing who makes the highest average record in that subject and in the previous year's Mechanical Drawing.

PRIZE AWARDS, 1910–11.

THE MUTH PRIZE.....Omar Bailey Buchanan

SCHOLARSHIPS.

Applications for scholarships should be filed with the Dean not later than September fifteenth. All scholarships except the Kendall Scholarship and the University Scholarship are awarded for one year only, but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term or whose deportment is unsatisfactory will be reported to the President's Council, and in the absence of extenuating circumstances the scholarships will be revoked.

The Kendall Scholarship and the University Scholarships are open to students in the College of Engineering. Detailed statements in regard to these scholarships are given on page 68.

HENRY HARDING CARTER SCHOLARSHIPS.—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consist of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

ADMIRAL POWELL SCHOLARSHIPS.—The Admiral Powell Scholarships were founded by the late Admiral Powell, U. S. Navy. The income from this endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland, or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to come up for examination as warrant officers in the Engineer Department of the Navy, or to those who desire to fit themselves for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics:

	Hours.
Navigation and Nautical Astronomy	6
Algebra and Geometry	3
Trigonometry	1½
Mechanical and Machine Drawing	4
English	3
French	3
German	3
Spanish	3
International Law	1
Commercial Geography	1
Admiralty Law	½
Boilers and Power Plants	3
Measurement of Power	2
Electricity	3
Electrical Engineering	6

COLLEGE OF THE POLITICAL SCIENCES.

GENERAL STATEMENT.

The College of the Political Sciences offers systematic instruction in the various branches of the political sciences. This education is intended to give a training that will fit certain students for consular and diplomatic positions and for the public service of the United States, while imparting that general culture and equipment necessary for efficient citizenship and the intelligent grasp of public questions. It is further intended as a suitable training for those who expect to enter commercial life, or to engage subsequently in the study of law.

In Washington are collected the official records of the country. As the capital of the nation, Washington furnishes the best, and in many instances the only, opportunity for studying the government in actual operation. Congress, the Supreme Court, the Executive Departments, and the government of the District of Columbia afford object lessons for the study of political science. Such an atmosphere for the student of the political sciences can be found nowhere else.

Among the special advantages for study may be mentioned the Library of Congress, which contains 1,700,000 volumes and over 300,000 maps, manuscripts, etc., accessible to the students of the University; the Library of the Smithsonian Institution, enriched by its exchanges with all the countries of the civilized world; the Library of the State Department, containing more than 80,000 volumes, including nearly all the important publications relating to international law, diplomacy, and political history; the Public Library of the District of Columbia, with 90,000 volumes; the United States Bureau of Education, rich in statistical material and foreign exchanges; the excellent working libraries of the Department of Commerce and Labor, the Bureau of Statistics, the Bureau of Trade Relations, the Bureau of American Republics, the Interstate Commerce Commission, the Census Bureau, and the Department of Agriculture.

Of these special facilities, as well as those which Washington enjoys as a center of general culture, the College of the Political Sciences is planned to take a thorough and systematic advantage.

ADMISSION.

The requirement for admission to the College of the Political Sciences is a four-year high school course, or its equivalent, amounting to 15 "units." A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

These 15 units must include English, 3 units; mathematics, 2 units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units. The remainder of the requirement is elective and may be satisfied, in general, by any high school subjects approved by the College Entrance Examination Board. The subjects that will be accepted are identical with those described under the head of "Definition of Requirements" in connection with the College of Arts and Sciences of the George Washington University. The certificate of the College Entance Examination Board will be accepted in so far as the subjects satisfy the requirements for admission. The certificates of the Washington high schools covering all the requirements for admission admit students without examination to the College of the Political Sciences. The certificates of all schools accredited to the University will be accepted in so far as they meet the requirements for admission. Candidates who cannot present certificates from accredited schools will be required to pass examinations in the subjects and at the times prescribed by the College of Arts and Sciences of the George Washington University.

Students who have completed work in other colleges or universities of approved rank and who have received credit for that work may be admitted to advanced standing, provided their work has been of such character as to be acceptable in lieu of courses in the College of the Political Sciences. Students who wish to pursue work leading to a graduate degree must present an acceptable Bachelor of Arts degree, or its equivalent, granted by a college or university of approved standing.

The session 1911–12 begins September 27, 1911. The academic year is divided into two parts—the first half year beginning September 27, and the second half year beginning February 1. Since many courses commence with the beginning of the second half year, a student may usually enter the College at that time without being necessarily delayed in the completion of the work required for graduation.

ADMISSION TO SPECIAL COURSES.

All courses of instruction are open to persons of maturity and suitable attainments who wish to pursue special studies without reference to a degree. Such persons are designated as special students. Upon successfully passing the examinations in the courses pursued, such students will receive certificates for work completed. But no one can be admitted to any course without satisfying the professor in charge that he has had previous training sufficient to carry on the work of the course with profit.

THE DEGREE OF BACHELOR OF ARTS.

The only undergraduate degree conferred by the University for work completed in the College of Political Sciences is the degree of Bachelor

of Arts (A.B.). To be recommended for this degree, the student (1) must have satisfied the entrance requirements, (2) must have been registered for at least one academic year, and (3) must have completed a total of sixty hours of class-room work (fifteen hours per week for four years), of which at least 30 must be taken in the field of the Political Sciences, or must be credited with subjects parallel to those taught in the College and obtained through transfer from another institution of similar grade.

Students who are registered in the College of the Political Sciences are required to pursue courses aggregating 6 hours per week in history, economics, or political science, through their first and second years. Other courses sufficient to aggregate 9 hours in each of the first two years may be chosen from any one of the five groups described by the College of Arts and Sciences. In other words, students may select studies conforming to the arrangement in any one of these five groups, substituting an aggregate of not less than 6 hours in history, economics, and political science for such other courses therein mentioned as they may desire to omit. During the third and fourth years of the student's course, subjects aggregating 9 hours per week must be pursued in the special field of the Political Sciences. An aggregate of 30 hours per week in that field is thus required for graduation from the College of the Political Sciences. Students may, however, elect the whole of their work during the third and fourth years in the College of the Political Sciences, thus securing a total credit of 42 hours. This credit, together with 18 hours chosen in some one of the groups of studies indicated by the College of Arts and Sciences, will entitle the student to the degree of Bachelor of Arts. Before graduation, students will be expected to pursue as part of their regular courses English and two other modern languages, electing at least 3 hours per week for one year in each language chosen.

A representative course of study covering the first two years of a student's course may be suggested as follows:

	Hours.
Economics	6
Political Science and History	9
English	3
Modern Languages	6
Mathematics or Natural Science	3
Psychology	3

Variations of this elective grouping and selection of studies to fulfill the general requirements of the grouping may be worked out in consultation with the Dean.

In the senior year students may elect 15 hours from courses in the Law School if they desire.

The Bachelor of Arts degree is granted by the University upon the recommendation of the Faculty. No student may receive the degree who has not been in residence at this University at least one academic year.

HIGHER DEGREES.

The higher degrees conferred by the University for work completed in the College of the Political Sciences are Master of Arts (A.M.), Master of Diplomacy (M.Dip.), and Doctor of Philosophy (Ph.D.). Candidates for any one of these degrees must possess a Bachelor of Arts degree, or its equivalent, granted by a college or university of acceptable rank.

Candidates for admission to courses for higher degrees must present the diplomas they hold, or certificates that they have received such diplomas, to the Secretary of the University, and obtain from him application blanks. When properly filled and signed, these applications are to be submitted to the Dean of the Faculty of Graduate Studies, together with catalogues of the institutions from which they hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

Candidates for the degree of Master of Diplomacy (1) must possess a knowledge of two modern languages other than English, (2) must complete twenty-four hours (twelve hours per week for two years) of class-room work, and (3) must prepare a satisfactory dissertation showing original research and investigation. But applicants for this degree who, in the attainment of their Bachelor of Arts degree, have completed the equivalent of twelve acceptable units in economics, political science, and public law may be credited with not more than twelve units toward the degree of Master of Diplomacy. Candidates for the Master of Diplomacy degree pursue their work under the general direction of the Dean of the College of Political Sciences. This degree is awarded by the University upon the recommendation of the Faculty of the College of Political Sciences.

For an outline of the requirements for the degree of Master of Arts and Doctor of Philosophy and for the regulations in regard to dissertations, the candidate is referred to the general catalogue of the University.

Students who become candidates for the Master of Arts or the Doctor of Philosophy degree pursue their work under the general direction of the Dean of the Faculty of Graduate Studies. These degrees are awarded by the University upon the recommendation of the Faculty of Graduate Studies. No student may receive any higher degree who has not been in residence in this University at least one academic year.

PRIZES.

Competition for the following prizes will be open to students of the Senior Class in the College of the Political Sciences who are entered for degrees and who have complied with the special conditions prescribed under the several foundations.

STAUGHTON AND ELTON PRIZES.—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

RUGGLES PRIZES.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

DAVIS PRIZES.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

DAUGHTERS OF THE AMERICAN REVOLUTION PRIZES.—These prizes, founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediæval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

THE THOMAS F. WALSH PRIZE.—This prize, established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, sonsists of a gold medal awarded annually to that student of the graduating class who, having maintained a high standard in the regular classes of Mediæval, Modern European, English, and American History, shall produce the best essay upon a designated period of the History of Ireland.

E. K. CUTTER PRIZE.—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

THE GARDINER G. HUBBARD MEMORIAL PRIZE.—This is a prize in American History established by Mrs. Gertrude M. Hubbard in memory

of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that student of the graduating class who has during four years maintained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

Colonial History Prize.—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the Professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

LIBRARY.

The library of the College of the Political Sciences contains several thousand volumes carefully selected with special reference to library work in connection with the courses of instruction offered. It affords a practical work-room for the use and convenience of students and is open during the day and evening. The main library of the University and the law library are in neighboring buildings. The Library of Congress, the Carnegie Library, and other libraries are easily accessible for extended research work and special investigation.

COURSES OF STUDY.

The courses offered in this College are grouped in four sections: (1) Political Science, (2) International Law and Diplomacy, (3) Economics, and Sociology, (4) History. The courses in each section are classified in three divisions: (1) for undergraduates, (2) for undergraduates and graduates, (3) for graduates. The first division includes those courses which are distinctly intended for beginners in the subjects who are in the earlier years of the college course. The second includes those which, while primarily for undergraduates, may nevertheless be pursued with profit by graduate students who have not had equivalent courses in their undergraduate work. The third division embraces courses which are offered primarily for graduate students, although undergraduates specially fitted to pursue the work may occasionally be admitted to such courses with the consent of the Dean and of the Professor in charge.

Courses in this College are open to students in the other departments of the University with the consent of their respective Deans. Students in the College of the Political Sciences may, likewise, with the consent of the Dean of the College, elect courses in the other departments of the University.

Lectures begin at 8.00 a. m. and close at 6.30 p. m.

SCHEDULE OF HOURS.

FIRST SEMESTER, 1911-1912.

TIME.	MONDAY.	TUESDAY.	WEDNESDAY.
8-8.50	Pol. Hist. Mod. Europe. —McNemar. Accounting—Willis.	Public Finance—Willis. Consular Service —Osborne.	Pol. Hist. Mod. Europe. —McNemar. Econ. of Agriculture —Coulter.
9-10	Pol. Parties—McNemar.		Pol. Parties—McNemar.
10-11			
11-12	Gen'l Econ.—Kern.		Gen'l Econ.—Kern.
1.30-2.30	Munic. Gov't—Moore. Hist. Am. Dip.—Swisher.		Munic. Gov't—Moore.
2.30-3.30	Mediæval Hist. —Swisher.	Am. Pol. Hist.—Swisher.	Mediæval Hist. —Swisher.
3.30-4.30	Mod. Europ. Hist. —Swisher.		Mod. Europ. Hist. —Swisher.
4.50-5.40	El. of Pl. Sci.—Moore. Prin. Int. Law—Stockton. El. Sociology—Kern.	Com. Law—Latimer. Eng. Hist.—Churchill. Hist. Pty. Gov't —Swisher.	El. of Pol. Sci.—Moore. Prin. Int. Law— McNemar.
5.40-6.30	Gen'l Econ.—Kern. Amer. Gov't—Moore. Com. Indus. & Trans. —Willis.	Combinations, Trusts —Kern. El. of Diplomacy.	Gen'l Econ.—Kern. Amer. Gov't—Moore.

TIME.	THURSDAY.	FRIDAY.	SATURDAY.
8-8.50	Public Finance—Willis.	Pol. Hist. Mod. Europe. —McNemar. Accounting—Willis. Consular Service —Osborne.	Econ. of Agriculture —Coulter.
9-10		Pol. Parties—McNemar.	
10-11			
11-12		Gen'l Econ.—Kern.	Current Hist.—Swisher.
1.30-2.30		Munic. Gov't—Moore. Hist. Am. Dip.—Swisher.	
2.30-3.30	Am. Pol. Hist.—Swisher.	Mediæval Hist. —Swisher.	
3.30-4.30		Mod. Europ. Hist. —Swisher.	
4.50-5.40	Com. Law—Latimer. Eng. Hist.—Churchill. Hist. Pty. Gov't —Swisher.	El. of Pl. Sci.—Moore. Prin. Int. Law— McNemar. El. Sociology—Kern.	Com. Law—Latimer. Eng. Hist.—Churchill.
5.40-6.30	Combinations, Trusts —Kern. El. of Diplomacy.	Gen'l Econ.—Kern. Amer. Gov't—Moore. Com. Ind. and Trans. —Willis.	

SCHEDULE OF HOURS.

SECOND SEMESTER, 1911–1912.

TIME.	MONDAY.	TUESDAY.	WEDNESDAY.
8–8.50	Pol. Hist. Mod. Europe. —McNemar. Adv. Accounting—Willis.	Money and Bank.—Willis. Com. Policies—Osborne.	Pol. Hist. Mod. Europe. —McNemar. Econ. of Agriculture —Pope.
9–10	Admin. Law—McNemar.		Admin. Law—McNemer.
10–11			
11–12	Econ. of Dist.—Kern.		Econ. of Dist.—Kern.
1.30–2.30	Europ. Gov'ts—Moore. Hist. Am. Dip.—Swisher.		Europ. Gov'ts—Moore.
2.30–3.30	Mediæval Hist. —Swisher.	Am. Pol. Hist.—Swisher.	Mediæval Hist. —Swisher.
3.30–4.30	Mod. Europ. Hist. —Swisher.		Mod. Europ. Hist. —Swisher.
4.50–5.40	Prin. of Int. Law —Stockton. Mod. Social Prob.—Kern.	Eng. Hist.—Churchill. Pri. R'ts and Immun. —Moore. Hist. Pty. Gov't —Swisher.	Prin. Int. Law —McNemar.
5.40–6.30	Econ. of Dist.—Kern. Nat'l Gov't—Moore. Com. Geog. and Business Organ.—Austin.	Pri. R'ts and Immun. —Moore. Labor Problems—Kern. Corp. Finance—Willis.	Econ. of Dist.—Kern. Nat'l Gov't—Moore. Com. Geog. and Business Organ.—Willis.

TIME.	THURSDAY.	FRIDAY.	SATURDAY.
8–8.50	Money and Bank —Willis.	Pol. Hist. Mod. Europe. —McNemar. Adv. Accounting—Willis. Com. Policies—Osborne.	Econ. of Agriculture —Pope.
9–10		Admin. Law—McNemar.	
10–11			
11–12		Econ. of Dist.—Kern.	Current Hist.—Swisher.
1.30–2.30		Europ. Gov'ts—Moore. Hist. Am. Dip.—Swisher.	
2.30–3.30	Am. Pol. Hist.—Swisher.	Mediæval Hist. —Swisher.	
3.30–4.30		Mod. Europ. Hist. —Swisher.	
4.50–5.40	Eng. Hist.—Churchill. Hist. Pty. Gov't —Swisher.	Prin. Int. Law —McNemar. Mod. Social Prob.—Kern.	Eng. Hist.—Churchill.
5.40–6.30	Labor Problems—Kern. Corp. Finance—Willis.	Econ. of Dist.—Kern. Nat'l Gov't—Moore. Com. Geog. and Business Organ.—Austin.	

TEACHERS COLLEGE.

The session of 1911-12 begins Wednesday, September 27, 1911.

GENERAL STATEMENT.

The purpose of the Teachers College is to provide (*a*) collegiate training for teachers, (*b*) instruction in education as a department of science.

While research in the field of educational science, and the provision of courses which may be taken mainly for their culture value, are important features of the work of any university department of education, the principal aim of the Teachers College is the practical and professional one of training teachers. In this large field the Teachers College will restrict itself for the present mainly to the preparation of teachers for the higher grades of instruction and administration. The many excellent normal schools and training colleges are preparing teachers for efficient service in the primary and grade schools; but the need of the broad and substantial training of a college course as a preparation for high-school teaching, and for responsible administrative positions, is now very generally admitted. Up to the present time it has too often happened that the college graduate who wishes to teach has been without any knowledge of the theory and practice of his vocation. The George Washington University, in common with many leading institutions, has endeavored to remedy this defect in the college training of the teacher, and also to supplement the training given by normal schools, by establishing a department for the systematic study of education in its historical, theoretical, and practical aspects.

The aims of the Teachers College may, accordingly, be summarized as follows:

(*a*) To promote the knowledge of educational science.

(*b*) To fit students for the higher positions in the public school service.

(*c*) To secure to teaching the rights and prerogatives of a profession.

(*d*) To aid in raising the standards of educational practice, and so to increase the efficiency of public education.

ORGANIZATION.

In order to combine to the best advantage a general college education with adequate professional training for teaching, the Teachers College provides a four years' college course, the first two years of which are devoted to a foundation of general culture courses, and the last two to

the professional courses and to specialization in the subjects which the student expects to teach.

Inasmuch as a large number of teachers in service are without college degrees, and a still larger number desire to supplement their professional training by taking special courses, the courses of instruction have been arranged to meet the needs of teachers in service, as well as of undergraduate students. The required courses constituting the prescribed work in education are given both in the morning and in the late afternoon hours, and are, therefore, easily accessible both to students and to teachers from the schools. The hours are also convenient for persons employed in the Departments of Government.

Opportunity is also offered to graduate students to pursue a major or minor in Education, leading to the granting of a Teacher's Diploma in conjunction with a Master's or a Doctor's degree. In this connection attention may be called to the exceptional facilities existing in Washington for graduate study, particularly in the history of education in the United States. The extensive collections of the Congressional Library and the library and archives of the United States Bureau of Education furnish unrivaled opportunities in this department.

ADMISSION.

Applicants for admission (*a*) as regular students, *i. e.*, as candidates for a degree, must present certificates showing that they have completed *a four-year high school course, or its equivalent, amounting to fifteen "units," three of which must be in English, two in Mathematics, and two in one of the following languages: Latin, Greek, French, German, or Spanish.* The remainder of the required fifteen units may be satisfied by any accredited secondary subjects.

A "unit" represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

Candidates who are unable to present certificates must pass the entrance examinations, which are regularly held in May of each year.

But (*b*) persons desirous of taking one or more of the professional courses, without becoming candidates for a degree, may be admitted as special students on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage.

Students who have begun their college course in another college may transfer their registration to Teachers College, provided they meet all the requirements for graduation specified below.

ADMISSION TO ADVANCED STANDING.

Students who have pursued courses of study in other colleges or universities of approved rank will receive advanced credit for such work on the presentation of certificates.

Graduates of approved Normal Schools, Training Colleges, or Technical Schools, and teachers of experience who have studied privately, will be admitted to such advanced standing as the courses they have pursued warrant.

THE TEACHERS COURSE.

The full college course for the training of teachers comprises the following educational divisions, the first two of which are made up of prescribed studies, the third of electives:

(*a*) A foundation of 25 hours of general culture studies, prescribed in accordance with the view that a teacher's preparatory training should omit no one of the principal elements of culture.

(*b*) A minimum of ten hours of professional training courses.

(*c*) Twenty-five elective hours of special information courses and further training courses.

In recognition of the professional training and the high number of prescribed hours of study, graduates of the Teachers College will receive, in addition to the Bachelor of Arts degree, a Teacher's Diploma. Both are conferred by the University.

An "hour" of study represents one hour of recitation or lecture work per week for one academic year, or its equivalent.

GRADUATION.

To be recommended for a Bachelor of Arts degree and a Teacher's Diploma, the student must complete courses of study aggregating at least sixty hours. Thirty-five of these hours are in prescribed studies, and the remainder in electives. The prescribed studies are the following:

(*a*) In general culture subjects:

	Hours.
English	3
Mathematics or Science	3
French, German, Latin or Greek	3
History	3
Psychology and Logic	3
Philosophy	5
Languages or Sciences	5

(*b*) In professional subjects:

	Hours.
History of Education	2
Principles of Education / Educational Psychology	3
Child Study and School Hygiene, or / Principles of Secondary Education	2
Class-room Management and Supervision, or / School Administration	1
Observation and Practice Teaching	2

(For further definition of these requirements, see the introductory paragraph under "Education," page 116.)

The electives should be chosen with direct reference to the subjects which the student wishes to teach. They are accordingly subject to the following restrictions:

All regular students must complete before graduation at least 9 hours in a Major, and at least 5 hours in a Minor subject, in addition to the first required course, if any, in the same subject.

As a Major, any one of the following subjects, or group of subjects, may be chosen: English, Latin, Greek, French, German, Mathematics, Physical Science, Biological Science, History, Economics and Political Science, Philosophy and Psychology.

As a Minor, choice may be made of any one of the other subjects in the same list, or of Education.

THE TEACHER'S DIPLOMA.

The Teacher's Diploma is granted in connection with the Bachelor of Arts degree upon the fulfillment of the following conditions: *a*. The student must have satisfactorily completed the courses of study defined in the preceding paragraph. *b*. He must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

The Diploma is also given in connection with higher degrees, provided a graduate student has taken a major or minor in Education, and has also satisfied the requirements *a* and *b* above, or in lieu of *a* has completed an equivalent amount of pedagogical and other work in another institution.

UNIVERSITY SCHOLARSHIPS.

Holders of the Kendall Scholarship and the University Scholarships may register in Teachers College on the same terms as in other departments of the University. For particulars see page 68.

PRACTICE TEACHING.

Ample opportunity will be afforded for practice in teaching by (*a*) attendance upon observation classes conducted by experienced teachers, and (*b*) actual practice in teaching under the supervision and subject to the criticism of teacher critics.

EXPERIMENTAL WORK.

Teachers College maintains a psychological laboratory for introductory experimental work. The equipment is specially adapted to the investigation of problems of interest to students of education.

The school system of a large city, moreover, offers abundant opportunity for observation, and for the statistical study of methods and other practical educational problems.

TEACHERS COLLEGE LIBRARY.

The department library of Teachers College is supplied with the most important reference books and periodicals in Education, Psychology, and Philosophy, together with the principal Reports, etc. The reading room is open from 9 a. m. to 6 p. m., each day of the University calendar year. In addition, books may be withdrawn over night and from Saturday to Monday. For a statement of other library facilities see "University Library," page 38.

TEACHERS APPOINTMENT BUREAU.

The Teachers College maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in the Teachers College, or in the College of Arts and Sciences, to secure positions as teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers. Communications should be addressed to the "Teachers Appointment Bureau," Teachers College, The George Washington University.

Department of Arts and Sciences.

COURSE OF INSTRUCTION.

UNIVERSITY SUBJECTS.

University Subjects are divided into three sections.

First-section courses can be taken by third or fourth year students only by permission of the Dean and the professor in charge of the subject. They may sometimes be recommended to graduate students, but are not counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the bachelor's degrees; they serve, however, with additional work as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses from 20 to 39, inclusive; third-section courses are numbered on from 40. The number of hours, unless otherwise specified, indicates hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one academic year; laboratory hours in Chemistry count one-third unit each, in other subjects one-half unit each. Laboratories and drawing-rooms will be open from 9 a. m. till 10 p. m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all of the preliminary requirements for the course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

ASTRO-PHYSICS.

FREDERICK EUGENE FOWLE, JR.....Lecturer

Third Section. Primarily for Graduates.

44. A lecture course on the astro-physical instruments employed in modern research. Mr. FOWLE.

BACTERIOLOGY AND PATHOLOGY.

FREDERICK FULLER RUSSELL, M.D.....Professor

Third Section. Primarily for Graduates.

40. Bacteriology. Special studies and practical research work. Professor RUSSELL.

BIOLOGICAL SCIENCES.

PAUL BARTSCH, M.S., Ph.D.....Professor
ALBERT MANN, A.M., Ph.D.....Professor
JULIA THECKLA MACMILLAN, A.M.....Assistant in Zoölogy

ZOÖLOGY.

First Section. Primarily for Undergraduates.

1. Systematic Zoölogy. I. Invertebrates. This includes lectures and laboratory work. The lectures in their scope cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters, classificatory laws, and the general principles of evolution. Lecture, one hour; laboratory, two two-hour periods. Professor BARTSCH.

2. Systematic Zoölogy. II. Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrata, and correlated with these is the study and dissection of typical specimens of each group. Open only to students having completed Course 1. Professor BARTSCH.

Second Section. For Undergraduates and Graduates.

20. Practical Zoölogy. A lecture course illustrated with lantern slides and demonstrations. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to expound the economic side of zoölogy. Open to all students. One hour. Professor BARTSCH.

23. Ornithology. A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. Professor BARTSCH.

Laboratory courses in histology and physiology will be arranged for competent students.

BOTANY.

Third Section. Primarily for Graduates.

40. Original investigation in (*a*) Economic Botany, Materia Medica, etc.; (*b*) Parasitism and Monstrosities; (*c*) Researches in Physiology of single groups; (*d*) Comparative Organography. Professor MANN.

CHEMISTRY.

CHARLES EDWARD MUNROE, Ph.D.....Professor
FRANK WIGGLESWORTH CLARKE, Sc.D..Professor of Mineral Chemistry
HARVEY WASHINGTON WILEY, Ph.D., M.D.,
Professor of Agricultural Chemistry
EDWARD GRANT SEIBERT, M.D.....Assistant Professor of Chemistry
N. MONROE HOPKINS, Ph.D.....Assistant Professor
EDWIN ALLSTON HILL, Ph.D.....Assistant Professor
THOMAS MALCOLM PRICE, Ph.D.....Assistant Professor
OTIS DOW SWETT, M.S.....Assistant Professor
HIRAM COLVER MCNEIL, Ph.D.,
Assistant Professor of Physical Chemistry

First Section. Primarily for Undergraduates.

1. General Chemistry. A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical chemistry. *Tu., Th., Sat.*, at 4.50. Professor MUNROE, Assistant Professor SWETT.

2. Laboratory Practice. A laboratory course for the study of the principles of chemistry and the methods of conducting chemical experiments. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor HILL, Assistant Professor SWETT.

3. Preparation and Study of the Properties of Chemical Substances. A laboratory course. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor SWETT.

4. Assaying and Metallurgy of the Precious Metals carried on by the methods used by the Government assayers, the laboratory being fitted up on the plan of that of the United States Mint. Twelve hours, for three months. Professor MUNROE, Assistant Professor SWETT.

5. Lectures on the Principles of Analysis. One hour. Professor MUNROE.

6. Metallurgy of Iron and Steel. A course of lectures and readings. *Tu.*, at 5.40. Professor MUNROE.

7. Qualitative Analysis. A brief course intended primarily for students in engineering. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor HILL, Assistant Professor SWETT.

Second Section. For Undergraduates and Graduates.

20. Qualitative Analysis. A laboratory course in the study of the properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Professor MUNROE, Assistant Professor PRICE, Assistant Professor SWETT.

21. Quantitative Analysis. A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Professor MUNROE, Assistant Professor PRICE, Assistant Professor SWETT.

23. Advanced course in Organic Chemistry. *Wed., Fri.*, at 4.50. Professor MUNROE, Assistant Professor SWETT.

24. Advanced course in Organic Chemistry. A continuation of Course 23. *Th., Sat.*, at 5.40. Professor MUNROE, Assistant Professor SWETT.

25. Chemistry of the Carbon Compounds. A laboratory course in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Professor MUNROE, Assistant Professor SWETT.

26. Physical Chemistry. A lecture course designed to be an introduction to physical chemistry, and to treat of the modern theories of chemistry from the physical standpoint. In this course special attention is given to the ionic theory, electro-chemistry, the law of mass action, and the phase rule. Two hours. Assistant Professor MCNEIL.

27. Stereo-chemistry. This course deals with the arrangements of atoms in space from a theoretical standpoint, while the student is taught how to form models by which to illustrate their arrangements. Two hours. Assistant Professor HILL.

28. Biochemistry. A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro*. Three three-hour periods. Assistant Professor PRICE.

30. Physiological Chemistry. A series of lectures and recitations on the proximate principles of the human body. Two hours for one term.

31. Clinical Analysis. A laboratory course to accompany 30. Professor MUNROE, Assistant Professor SEIBERT.

Third Section. Primarily for Graduates.

40. Explosive Substances. Professor MUNROE.

41. Analytical Methods. Professor MUNROE.

43. Development of the Theory of the Constitution of the Natural Silicates. Professor CLARKE.

44. Special Researches in Agricultural Chemistry. Professor WILEY.

45. Special Researches in Electro-chemistry. Assistant Professor HOPKINS.

Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington. These meetings are held on the second Thursday of each month from October to May, in the Assembly Hall of the Cosmos Club, at 8 p. m. Also the meetings of the Chemical Society of the George Washington University, which is a most active and efficient student organization.

CLASSICAL ARCHÆOLOGY.

MITCHELL CARROLL, Ph.D.....Professor

Third Section. Primarily for Graduates.

40. Homer and the Greek Epic.

41. Greek Aesthetics: Plato and Aristotle.

42. Topography and Monuments of Athens and Rome.

43. A special course of illustrated lectures on selected topics in the History of Greek Art, with conferences, open to graduates, undergraduates, and auditors, will be given during the second half-year. Definite announcement later.

Professor Carroll will meet his students in The Octagon and in the Library of Congress.

CLASSICAL LANGUAGES AND LITERATURES.

CHARLES SIDNEY SMITH, Ph.D.....Professor

GREEK.

First Section. Primarily for Undergraduates.

A. Elementary Course. For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirement in Greek, with the exception of Homer. Three hours. Not given in 1911-12.

B. Homer: Iliad I-IV or Odyssey V-VIII. For students who have taken Course A and desire to prepare themselves to enter Course 1. Two hours.

1. Herodotus (selections): Lysias (selected orations); Euripides (Alcestis); Greek prose composition. *Mon., Wed., Fri.,* at 2.30.

2. Xenophon (Memorabilia); Thucydides (Book VII); Sophocles (Antigone). *Mon., Wed., Fri.,* at 11.

Second Section. For Undergraduates and Graduates.

20. Plato (selections, including the Apology and Crito); Aristophanes (Clouds or Frogs). Two hours.

21. Demosthenes (selected orations); Lucian (selected dialogues); Homer (selections). Not given in 1911-12.

LATIN.

First Section. Primarily for Undergraduates.

1. Livy (Books I and XXI); Cicero (De Senectute); Horace (Odes and Epodes); Latin prose composition. *Mon., Wed., Fri.,* at 3.30

2. Cicero and Pliny (selected Letters); Horace (Satires and Epistles); Martial (selections). *Mon., Wed., Fri.,* at 1.30.

Second Section. For Undergraduates and Graduates.

20. Tacitus (selections); Terence (Phormio); Plautus (Captivi). Two hours. Not given in 1911-12.

21. Roman Literary Criticism: Quintilian (Book X) and Horace (Ars Poetica); Catullus, Tibullus, and Propertius. *Tu., Th.,* at 11.

22. Advanced Latin Composition and Reading at Sight. Practice in Latin expression and style. *Th.,* at 1.30.

Third Section. Primarily for Graduates.

The work in this Section is designed to afford discipline in the methods of philological criticism, with special reference to the interpretation of classical authors, and will include opportunities for original research on the part of competent students. In order to make the work as helpful as possible for those who expect to become teachers, the center of study each year will be one of the authors usually taught in the secondary schools. With the approval of the instructor, properly qualified Seniors may be admitted to these courses. The authors selected are as follows:

40. Vergil, and Roman Epic Poetry. *Tu.,* 4.50-6.30.

41. Cæsar, and the Roman Historians. Given in 1910-11. Not given in 1911-12.

42. Cicero, and Roman Oratory. Given in 1909-10. Not given in 1911-12.

SECTION III—ECONOMICS AND SOCIOLOGY.

Henry Parker Willis, Ph.D.....Professor
Charles William August Veditz, Ph.D.....Professor
Robert Russ Kern, A.B.....Assistant Professor
John Ball Osborne, A.M.....Lecturer
John Wilmer Latimer, LL.B.....Lecturer
John Lee Coulter, M.A.....Lecturer
Jesse E. Pope, Ph.D.....Lecturer

Second Section. For Undergraduates and Graduates.

20. General Economics.—An outline course in the principles of political economy, devoted mainly to the study of production and exchange under present-day conditions. Given in two sections. First half-year. *Mon., Wed., Fri.,* 11 a. m. (Section *a*); 5.40 p. m. (Section *b*), Mr. Kern.

21. The Economics of Distribution and Consumption.—A continuation of Course 20, devoted mainly to the problems of rent, interest, wages, and profits, and including an examination of competition, private property, luxury, saving, and speculation, in their effects upon human welfare. Given in two sections. Second half-year. *Mon., Wed., Fri.,* 11 a. m. (Section *a*); 5.40 p. m. (Section *b*), Mr. Kern.

22. General Sociology.—An outline course in the principles of sociology, devoted mainly to the study of social origins and the development of existing social institutions, with special attention to social psychology. Two hours, first half-year. *Mon., Fri.,* at 4.50. Mr. Kern.

23. Modern Social Problems.—A further analysis of modern social conditions with special studies of current questions in sociology. Prerequisite, the course in general sociology. Two hours, second half-year. *Mon., Fri.,* at 4.50. Mr. Kern.

24. The History of Economic Thought.—A review of the development of economics as a science from the earliest times to the present. Lectures and library readings. Two hours, first half-year. *Th.,* 4.50 to 6.30. Not given in 1911-12. Mr. Kern.

25. Contemporary Economic Theory.—An advanced course in the theory of economics in continuation of the preceding; a review of current economic doctrines with critical analysis. Two hours, second half-year. *Th.,* 4.50 to 6.30. Not given in 1911-12. Mr. Kern.

26. Public Finance.—A course in the development of budgetary and fiscal methods and principles. The history and tendencies of public expenditure under the Federal and State governments. The theory of taxation; administration of public domains, and industries; public debts. First half-year. *Tu., Th.,* 8.00 a. m. Professor Willis.

27. Money and Banking.—The history and theory of money; the production of the precious metals; the theory of prices and measurement of price fluctuations; monetary systems; the relation of the Treasury system to our money supply; the theory of credit and banking; the national bank system of the United States and the banking system of foreign nations. Second half-year. *Tu., Th.,* at 8.00 a. m. Professor Willis.

28. Accounting.—General principles of accounting. A text-book on accounting and hand-books dealing with accounting forms and methods

are used as guides. Much of the work is based upon library readings with suggested problems to be worked out and submitted. The course includes a study of the accounts of representative kinds of business and the methods of accounting applicable thereto. First half-year. *Mon., Fri.,* at 8.00 a. m. Professor WILLIS.

29. CORPORATION FINANCE.—The various sorts of corporation securities; methods of organizing and financing modern industrial enterprises; the nature of investment and speculation; stock and produce exchanges; the effect of speculative and investment operations on the staple industries. Second half-year. *Tu., Th.,* at 5.40 p. m. Professor WILLIS.

30. THEORY AND PRACTICE OF STATISTICS.—A conference course in the principles of statistics, with concrete examples of their applications; the graphic method; the use of averages; index numbers; and the special application of statistics to insurance; government statistical methods and publications in the United States and in the principal foreign countries. Lectures and reading. Not given in 1911-12. Two hours, first half-year. Professor WILLIS.

31. INTERNATIONAL TRADE.—A discussion of the theory and mechanism of international trade; a survey of the commerce of the world; the commercial relations of the United States. Two hours, first half-year. Not given in 1911-12. Mr. OSBORNE.

32. COMMERCIAL POLICIES.—Study of the trade and navigation policies of its principal commercial powers; organization and methods of their trade-promoting institutions; tariff systems of the world; history of American tariff legislation; commercial treaties and agreements of the United States; history of the policy of reciprocity; doctrine of the most favored nation. Two hours, second half-year. *Tu., Fri.,* at 8.00 a. m. Mr. OSBORNE.

33. COMMERCIAL AND MARITIME LAW.—An outline of the principles of the law relating to commercial transactions generally, including those peculiar to the sea, with more especial reference to the subjects of contracts, sales, bailments, agency, partnership, negotiable instruments, and common carriers. First half-year. *Tu., Th., Sat.,* 4.50 p. m. Mr. LATIMER.

34. COMMERCIAL AND INDUSTRIAL HISTORY.—The rise and progress of commerce from antiquity to modern times, with particular emphasis on the effects of commerce upon civilization and the relations between commercial and political development. The rise and progress of economic activities in the English colonies of North America and of the agricultural, commercial, and industrial growth of the United States. First half-year. Not given in 1911-12.

35. MODERN BUSINESS ORGANIZATION.—A study of the modern business, the present modes of producing and distributing commodities,

modes of controlling prices, systems of retailing, advertising, etc. Second half-year. *Wed.*, 5.40 p. m. Professor WILLIS.

36. COMMERCE, INDUSTRY, AND TRANSPORTATION OF THE UNITED STATES.—A study of the resources, industries, business activities, and internal and foreign commerce of the United States; the products of the various sections; the transportation systems by which they are interchanged or assembled for manufacturing and redistribution; manufacturing systems; domestic exchange; distribution to foreign countries; the markets in which exports are sold and from which imports are drawn. Two hours, first half-year. *Mon., Fri.*, 5.40 p. m. Professor WILLIS.

37. COMMERCIAL GEOGRAPHY AND BUSINESS ORGANIZATION.—The products, industries, and commerce of the various countries and sections of the world; the exchanges between climatic sections and between the great producing and manufacturing sections and countries of the world; the staple articles of commerce, their places of production and sale; manufacturing industries and the distribution of their products; the transportation and financial systems by which interchanges are facilitated; a comparative view of the commercial, economic, and financial conditions in the various sections and countries of the world. Two hours, second half-year. *Mon., Wed., Fri.*, at 5.40 p. m. Mr. AUSTIN and Professor WILLIS.

38. COÖPERATION AND RURAL ECONOMICS.—Economic principles governing and comparative advantages of individual, corporate, and coöperative organization in ownership of land, water rights, and farm equipment; in production, manufacturing, storing, and marketing of agricultural products; in buying of farm equipment and supplies; in credit, insurance, telephone, etc. Problems of farm labor; size, ownership, and value of farms, land titles, etc. Lectures, assigned readings, reports on special topics, quiz. First half-year. *Wed., Sat.*, 8.00 a. m. Dr. COULTER.

39. AGRICULTURAL CREDIT.—The importance of agricultural credit and its relation to other forms of credit will be discussed. Its history and development in the leading European countries will be traced and special emphasis will be laid on agricultural banks and credit, the status of agricultural credit in the United States and the applicability of European methods. Lectures and assigned readings. Second half-year. *Wed., Sat.*, 8.00 a. m. Dr. POPE.

SEMINAR IN AGRICULTURAL ECONOMICS.—A research course, designed for students who desire to do work in Agricultural Economics, conducted by the seminar method. Assigned readings and lectures will be given, but the main object will be to encourage and direct students in individual research. Hours to be arranged. Dr. POPE.

40. Taxation.—Taxation, its administration and organization. The legal problems which arise in connection with taxation will be studied through typical cases. Two hours, second half-year. Not given in 1911-12. Professor Willis.

41. Advanced Accounting.—A special study of accounting principles in their application to specified classes of business. Prerequisite—the course in accounting. Second half-year. *Mon., Fri.,* at 8.00 a. m. Professor Willis.

42. Insurance.—The historical development of insurance; its economic aspects; fire, accident, and life insurance from the standpoint of internal organization; rates; policies. Two hours. Second half-year. Not given in 1911-12. Professor Willis.

43. Labor Problems.—A brief sketch of the labor movement in the United States and of the aims and methods of trade unions, followed by a discussion of such problems as: Child labor; dangerous occupations; workingmen's insurance against sickness, old age, accidents, and unemployment; strikes and industrial conflicts; conciliation and arbitration; collective bargaining. Two hours, second half-year. *Tu., Th.,* 5.40 p. m. Mr. Kern.

44. Combinations—Trusts.—A discussion of the conditions which have favored the growth of large business combinations, the nature of their organization, their influence upon prices and productive efficiency, and the regulation and supervision of them. Two hours, first half-year. *Tu., Th.,* 5.40 p. m. Mr. Kern.

Primarily for Graduates.

Seminar in Sociology.—A research course for the detailed investigation of special sociological problems, suitable for those who are engaged in original investigation or in the preparation of a thesis. Hours to be arranged. Professor Veditz.

ENGINEERING.

*Philander Betts, M.S., E.E.....Assistant Professor of Electrical Engineering

Edwin Vivian Dunstan, C.E., Assistant Professor of Civil Engineering

Oscar Alexander Mechlin, C.E.....Assistant Professor of Civil Engineering

Frank Charles Starr, B.S....Assistant Professor of Civil Engineering

Charles Ward Mortimer, M.E.....Assistant Professor of Electrical Engineering

Hayner Haskell Gordon, E.E., Ph.D.....Instructor in Mechanical Engineering

*Absent on leave.

ROBERT WILBUR MORSE, S.B.....Instructor in Mechanical Engineering
MARK RITTENHOUSE WOODWARD, E.E.....Instructor in Electrical Engineering

APPLIED MATHEMATICS.

Second Section. For Undergraduates and Graduates.

20. Analytical and Applied Mechanics. (1) Statics: including the composition, resolution, and equilibrium of forces; center of gravity; friction; machines. (2) Kinematics and Kinetics: including rectilinear and curvilinear motion; motion under action of variable forces and in resisting media; constrained and rotary motion; impact; work and energy; moment of inertia. Four hours a week, first half-year. Assistant Professor DUNSTAN.

21. Hydraulics. The theoretical principles of hydraulics: including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Four hours a week, first half-year. Assistant Professor DUNSTAN.

22. Mechanics of Materials and Theory of Elasticity: including elastic and ultimate strength and deformation; simple, cantilever and continuous beams; columns, torsion; combined stresses; compound columns and beams: including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours a week, second half-year. Assistant Professor MECHLIN.

CIVIL ENGINEERING.

First Section. Primarily for Undergraduates.

1. Surveying and Mapping. This course includes the theory and use of instruments; land, topographic, hydrographic, mining, city, and geodetic surveying; measurement of volumes, projection of maps, etc. Two hours a week. Field work, usually on Saturday. Assistant Professor STARR.

2. Railroad Engineering. Railroad curves and earthwork; location of about two miles of railroad, including reconnaissance, preliminary and final locations, construction of contour maps and profiles, computation of earthwork, design of culverts, etc.; laying out curves; track work, etc. Two hours a week. Field work, usually on Saturday.

3. Highways and Pavements. Location of highways; construction, improvement and maintenance of roads and pavements; curbs, gutters, sidewalks. One lecture and one design period during the first term. Assistant Professor MECHLIN.

4. Materials of Construction. A study of the properties of stone, brick, cement, concrete, wood, iron, steel, etc., with reference to processes of manufacture. The course is supplemented by a numbr of prac-

tical tests made by the students. Two lectures for first term and one lecture and one laboratory period for second term. Assistant Professor MECHLIN.

5. Surveying Instruments. A two-months' course for Mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours per week. Assistant Professor STARR.

6. Foundations. A two-months' course for Mechanical and Electrical Engineering students, covering the general principles of foundation construction and the materials used. Two hours a week. Assistant Professor MECHLIN.

8. A course in Practical Astronomy for Civil Engineering students. Special attention is given to the methods of determining latitude, longitude, azimuth and time with the engineer's transit; observations for each being a required part of the course. Two lecture-recitation periods per week for one term. Assistant Professor STARR.

Second Section. For Undergraduates and Graduates.

20. Masonry Construction. A course in the use of cement, brick, stone, and concrete, the design of foundations, retaining walls, dams, bridge piers and arches. Included in this is a short course in stereotomy. Two lectures and two design periods per week. Assistant Professor MECHLIN.

21. Hydraulic Engineering. The design and construction of water-power plants and irrigation works. Flow of rivers; rainfall and run-off; methods of development; hydraulic motors; power transmission. Irrigation plans; distributing systems; water rights and irrigation law. Four lectures and two design periods per week, second term. Assistant Professor DUNSTAN.

22. Theory of Structures. A course covering the determination of stresses in framed structures by graphical and by analytical methods. The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods per week. Assistant Professor DUNSTAN.

23. Theory of Structures. The theory of steel design; the design of a roof truss, of a plate girder and a pin connected bridge truss and a study of the theory and design of suspension, continuous, cantilever, and arch bridges, and the details of steel-mill and office-building construction. Three lectures and two design periods per week. Assistant Professor MECHLIN.

24. Sanitary Engineering. This course treats of the drainage of buildings and lands; the treatment and disposal of sewage and the sewerage of cites and towns; public water supply and methods of water purification. Three lectures and one design period per week. Assistant Professor MECHLIN.

Third Section. Primarily for Graduates.

40. Advanced Masonry. A course in the theory and design of reinforced concrete structures. Assistant Professor MECHLIN.

41. Advanced Masonry. The theory of retaining walls and arches. Assistant Professor MECHLIN.

42. Testing of Materials. This course involves original research upon assigned topics. Assistant Professor MECHLIN.

43. Water-power Development. A comparative study of the principal water-power developments of the United States and Europe. The course consists largely of assigned readings and reports thereon. Assistant Professor DUNSTAN.

ELECTRICAL ENGINEERING.

First Section. Primarily for Undergraduates.

1. Elementary Mathematical Theory of Electricity and Magnetism; Direct Current Motors and Generators; Design work; Elements of Electrical Engineering, and problems.

For about one-third of the session elementary electricity and magnetism is studied, with especial attention to the needs of engineering students. This is followed by a study of direct current generators and motors, covering the laws of the magnetic circuit as applied to the dynamo, and including the design of electrical apparatus and machinery. During the last part of the course a study of the elements of electrical engineering is taken up and an introductory study of alternating currents is begun. Numerous problems are assigned throughout the course. Five hours a week. Assistant Professor MORTIMER.

4. Electrical Measurements. A laboratory course for Juniors. Selected experiments. Foster's Hand-book and special laboratory notes are used for reference. Six hours a week, first term. Assistant Professor MORTIMER.

5. Electrical Laboratory. Experiments and tests involving the operation of direct-current dynamos and motors, including tests of motors in service, operating elevators, street cars, and machinery of various kinds. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering." Six hours a week, second term. Assistant Professor MORTIMER.

6. Industrial Electricity. A practical course intended for Juniors in Civil Engineering, embracing the selectionn and operation of electrical machinery, electrical railways and other applications of electric motors. Two hours a week for the first term. Mr. WOODWARD.

7. Electrical Engineering. A course in theoretical and applied electricity intended for Seniors in Mechanical Engineering. It embraces the selection and operation of electrical machinery, the location, construc-

tion, and operation of power plants, electric railways and transmission lines, the use of electric motors for driving machinery, and the working of storage batteries, elevators, hoists, and cranes. Three hours a week. Mr. WOODWARD.

8. Electrical Design. A course for Seniors in Electrical Engineering, embracing calculation and design of electrical machinery and accessories, including switchboards, rheostats, instruments, and arrangement of same. One recitation period and one drawing period throughout the year.

Second Section. For Undergraduates and Graduates.

21. Alternating Current Theory and Machinery. A course for Seniors in Electrical Engineering, covering the principles of single as well as polyphase currents, including study of machines, circuits, transformers, etc. Four hours a week. Assistant Professor MORTIMER.

22. Electrical Distribution. A course for Seniors in Electrical Engineering, covering the whole field of distribution of electricity for light and power. Text-book: Crocker's Electric Lighting; second volume, "Distribution System." Two hours a week. Assistant Professor MORTIMER.

23. Electrical Applications. A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as motive power, including elevators, hoists and machine drive, telephony, telegraphy, electro-metallurgy, etc. One hour a week. Mr. WOODWARD.

24. Advanced Laboratory Work for Seniors in the Electrical Engineering Course. Covers test and experimental work with direct and alternating currents, tests of machines, circuits, transformers, circuits containing inductance and capacity, measurement of power in alternating current circuits, plotting of curves, etc. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering," with Foster's Electrical Engineer's Hand-book for general reference. Six hours a week. Assistant Professor MORTIMER.

25. Inspection of Plants and Industrial Works. In the vicinity of Washington and Baltimore are a number of modern electric lighting and street railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written descriptions submitted by the students.

26. Electric Lighting and Illumination. A course for Seniors in Electrical Engineering covering the subject of electric lighting and illumination, including detailed study of different types of lamps, shades, arrangement of light sources, effect of walls, etc. Two hours per week, first term. Mr. WOODWARD.

27. Electric Railways. A course for Seniors in Electrical Engineering covering the theory and practice of modern, direct and alternating current railways. Two hours a week, second term.

28. High Frequency Currents. A lecture course covering the theory of high frequency and oscillatory currents and their application to wireless Telegraphy and Telephony. The condenser discharge, the theory of resonance in coupled circuits, and electromagnetic waves will be treated. The design of wireless telegraph and telephone apparatus will also be discussed. The class will meet in the laboratory from time to time to familiarize themselves with the use of wireless apparatus. One period a week. Dr. GORDON.

Juniors and Seniors in Electrical Engineering are expected to attend the monthly meetings of the Washington Branch of the American Institute of Electrical Engineers.

Third Section. Primarily for Graduates.

41. Advanced Dynamo Design. This comprises the more rigid calculation of the magnetic circuit, the estimation of the electrical and mechanical losses, together with an exposition of the elements of mechanical design. Assistant Professors BETTS and MORTIMER.

42. Advanced Course in the Mathematical Theory of Alternating Currents. Assistant Professors BETTS and MORTIMER.

43. Advanced Course in Polyphase Currents. Assistant Professors BETTS and MORTIMER.

44. Advanced Laboratory Work, Alternating (including Polyphase) Current Apparatus. Assistant Professors BETTS and MORTIMER.

GRAPHICS.

First Section. Primarily for Undergraduates.

1. Mechanical and Freehand Drawing. A general course embracing the care and use of instruments; orthographic and isometric projections; sections and intersections; curve plotting; sketching of simple machine details; freehand lettering; principles of working drawings. Six hours a week in the drawing-room. Assistant Professor STARR.

2. Advanced Mechanical Drawing. A course in working drawings especially designed for Electrical and Mechanical Engineering students. Drawing-room rules and practice; conventional forms and standards; arrangement of views and sections; freehand shop-sketches; detailing from sketches, models and general drawings; proportioning by empirical formulas. Six hours a week in the drawing-room.

8. Descriptive Geometry. A study of the representation of lines, surfaces, and solids, and of their relations; tangencies, intersections, and developments; warped surfaces; shades and shadows; original con-

struction problems. Two lectures and one drawing period per week. Assistant Professor STARR.

10. Topographic Drawing. A general course in plotting, topographic symbols, and lettering to accompany the work in surveying. One drawing period per week. Assistant Professor STARR.

Third Section. Primarily for Graduates.

40. Advanced Graphic Statics. A study of the graphical analysis of higher structures, with special reference to the method of influence lines. Assistant Professor DUNSTAN.

MECHANICAL ENGINEERING.

First Section. Primarily for Undergraduates.

1. Mechanism. A course in the systematic study of the kinematics of machinery, in which mechanical movements are reduced to scientific analysis. Carefully developed problems and diagrams of changes of position and speed in mechanisms are constantly used.

Some attention is given to the design of gear teeth, and twenty-five hours in the second term are devoted to valve gears for steam engines. Three lecture-recitation hours and two drawing hours per week during the Sophomore year. Mr. MORSE.

6. Engineering Drawing. This course provides for the application of the principles taught in the courses of Mechanism and Steam Engineering to specific problems. Practice is given in the design of valve gears and quick return motions, and in the determination of velocity diagrams for special engine and other linkages. There is also included the complete working drawings for a steam boiler. Six drawing hours per week during the Junior year. Mr. MORSE.

7. Machine Design. This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are: The design of a boiler; shafting; a series of shaft couplings; an automobile transmission, and a punching machine.

The constructive details and calculations are discussed and the limitations of theoretical and empirical formulas pointed out. One lecture-recitation hour and five drawing hours per week during the Senior year. Mr. MORSE.

9. Engineering Laboratory. A course of practical work in testing general engineering apparatus for efficiency. The work consists in indicating steam engines; determining the evaporative efficiency of boilers; tests on the strength of materials; measurement of the flow of water; gas-engine brake tests; refrigeration tests, and fuel value determinations. Six laboratory hours per week for the last half of the Junior year.

10. Engineering Laboratory. This course is a completion of Course 9. Six hours a week during the Senior year.

Second Section. For Undergraduates and Graduates.

20. This course deals with the principles of thermo-dynamics; the properties of gases and vapors, especially steam, and the flow of steam through nozzles. The application of the above principles is discussed and the simple and compound steam engine and the steam turbine are studied. Three lecture-recitation hours per week during the first half of the Junior year. Dr. GORDON.

21. Boilers and Power Plant Accessories. This course is devoted to a study of Boilers, Condensers, Feed Pumps, Economizers, Stokers, and other power-plant accessories. The design of power plants will be discussed. Three lecture-recitation hours per week for the last half of the Junior year. Dr. GORDON.

22. Gas Engines and Compression and Refrigeration Machinery. This course deals with the theory and practice concerning the internal combustion motor. During the second half of the term the theories and principles involved in compression machinery and artificial refrigeration will be discussed. Three lecture-recitation hours per week for the last half of the Senior year. Dr. GORDON.

23. Hydraulic Machinery. This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The course will also treat of impulse wheels; water motors of the piston type; machinery for the utilization of hydraulic pressure; hydraulic pressure pumps, and hydraulic presses; hydraulic tools; pumps operated by steam, electricity, or power; and high duty pumps and water meters. Two lecture-recitation hours per week for the first half of the Senior year. Mr. MORSE.

24. Cotton Machinery and Machine Tools. A study of the mechanisms found in cotton machinery and machine tools. Two lecture-recitation hours per week throughout the Junior year. Mr. MORSE.

26. Dynamics of Machines. A course including a number of the principal applications of Dynamics to moving machinery, such as governors, fly-wheels, and the effect of the reciprocating parts of the steam engine. Two lecture-recitation hours per week throughout the Senior year. Mr. MORSE.

27. Power-plant Design. This course provides for the design with complete plans and specifications of a power plant of industrial proportions by the student. One lecture-recitation hour and six drawing hours per week for the first half of the Senior year. Dr. GORDON.

28. Industrial Management. A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the methods of superintendence and of compensating labor, the determination of the costs of production, and the effect on costs of different systems of distributing indirect expenses. Two lecture-recitation hours per week for the last half of the Junior year. Mr. MORSE.

ENGLISH.

WILLIAM ALLEN WILBUR, A.M.....Professor
*DE WITT C. CROISSANT, Ph.D.....Assistant Professor
EDWIN WILEY, Ph.D.....Lecturer

First Section. Primarily for Undergraduates.

1. English Rhetoric. A study of the principles of self-expression through language with practice in composition. *Tu., Th., Sat.,* at 10. Professor WILBUR.

2. English Rhetoric. Parallel with Course 1. *Mon., Wed., Fri.,* at 4.50. Professor WILBUR.

NOTE.—Credit for Course 1 or 2 is requisite for admission to any other course in English.

3. Humanistic Studies (1911-12). Advancement of Learning, Book I; Holy Dying; Pepys' Diary; Evelina; The Prelude; Waverly; Essays of Elia; Confessions of an English Opium Eater; Kim; Poetry of Longfellow. *Tu., Th., Sat.,* at 9.00. Professor WILBUR.

4. Humanistic Studies (1911-12). Ecclesiastical Polity, Book I; Areopagitica; Letters of Junius; Pride and Prejudice; Endymion; Vanity Fair; Lorna Doone; Kidnapped; Virginibus Puerisque; American Short Stories. *Mon., Wed., Fri.,* at 5.40. Professor WILBUR.

Second Section. For Undergraduates and Graduates.

22. Shakespeare. The Comedies. Not given in 1911-12.

23. Shakespeare. The Tragedies. *Mon., Wed., Fri.,* at 1.30. Professor WILBUR

The Temple edition of Shakespeare is recommended.

25. The Idylls of the King (First Term). The Ring and the Book (Second Term). *Tu., Th., Fri.,* at 3.50. Professor WILBUR.

Third Section. Primarily for Graduates.

44. English Seminary. Graduate students engaged in individual research will discuss assigned topics in a seminary of English studies, meeting each week at an appointed time.

*Absent on leave.

GEOLOGY AND MINERALOGY.

GEORGE PERKINS MERRILL, Ph.D.....Professor
RAY SMITH BASSLER, Ph.D.....Assistant Professor

First Section. Primarily for Undergraduates.

1. Mineralogy. Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. *Tu., Th.,* at 5.40.

2. Geology. Systematic geology; dynamical, structural, and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Text-books: Scott's Introduction to Geology, Merrill's Rocks, Rock Weathering, and Soils. *Mon., Fri.,* at 5.40.

Third Section. Primarily for Graduates.

40. Economic Geology. [Geology 1 and 2 and Chemistry 1 are prerequisite for this course.] The course covers the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc.; and (3) the non-metallic minerals as the coals and hydrocarbon compounds; salts and materials used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones, building stones, limes, cements, and mineral waters. Text-books: Weed's Translation of Beck's Nature of Ore Deposits; Merrill's Stones for Building and Decoration and the Non-metallic Minerals. *Mon., Fri.,* at 4.50.

41. Paleontology. A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology.

Advanced study in Geology, both systematic and applied, is arranged to cover two years. Only graduates will be admitted to Courses 42 and 43.

42. Advanced Geology and Paleontology. The student in this first-year course may devote his time largely, if necessary, to perfecting himself in methods; to general work in the laboratory and in the field; to

the examination of geological materials, and to familiarizing himself with the literature of the subject.

43. Advanced Paleontology and Stratigraphic Geology. A continuation of Course 41. Besides the study of paleontological methods, the student is expected to pursue some special line of investigation in order to fit himself for original research.

GERMANIC LANGUAGES AND LITERATURES.

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor

First Section. Primarily for Undergraduates.

1. Elementary. The essentials of German grammar; translation of prose and poetry; composition and dictation. This course is open only to beginners, and the work done is equivalent to that of a two years' course in high schools and academies of good standing. *Tu., Th., Sat.,* at 11. Professor SCHOENFELD.

2. Parallel with Course 1. *Tu., Th., Sat.,* at 4.50. Professor SCHMIDT.

3. Selected texts from the foremost contemporary authors will be read and one or more of the German classics carefully studied. The work in grammar and composition done in elementary German will be continued on a more advanced plane, with special emphasis on syntax, word-formation, and the relationship of German and English. This course is equivalent to the advanced German of the admission requirements, and it is open only to students who have passed Course 1 or 2, or have satisfied the admission requirement in elementary German. *Mon., Wed., Fri.,* at 11. Professor SCHOENFELD.

4. Parallel with Course 3, except that in the second term scientific German is read. *Tu., Th., Sat.,* at 5.40. Professor SCHMIDT.

5. Advanced course in German syntax; principal difficulties of the language; idioms; synonyms; extensive translations of the best English prosaists into German; essays; selected advanced prose; classical reading and literature; German history. Special training for advanced students in the historical and economic departments. Open to students who have passed Course 3 or have satisfied the admission requirement in advanced German. *Mon., Wed., Fri.,* at 1.30. Professor SCHOENFELD.

Second Section. For Undergraduates and Graduates.

20. History of German Literature from the beginnings till 1648. Collitz's Selections and Priest's German Literature. Lectures, readings, essays. *Mon., Wed., Fri.,* at 10. Professor SCHOENFELD.

21. Literary awakening in Germany in the time of Frederick the Great; critical study of the literary centers—Zürich, Leipzig, Göttingen,

Berlin. The Storm and Stress period, and the youthful works of Schiller and Goethe. *Tu., Th., Sat.,* at 10. Professor SCHOENFELD.

The intervening periods of literature reserved for subsequent years.

Third Section. Primarily for Graduates.

40. Seminar. Critical study of Klopstock's Odes and First Three Cantos of Messias. Professor SCHOENFELD.

41. Epic and lyrical poetry in the twelfth and thirteenth centuries, as exemplified in the Nibelungenlied and in Walter von der Vogelweide. Professor SCHOENFELD.

42. Gothic. Introduction to comparative Indo-European grammar. Two hours. Professor SCHMIDT.

43. Old High German. The development of the German language. Two hours. Professor SCHMIDT.

Only one of the foregoing two courses (42, 43) is given in any one year.

For notice of the Richard Heinzel Germanic Library, see page —.

HISTORY.

CHARLES CLINTON SWISHER, Ph.D., LL.D. Professor
LEVI RUSSELL ALDEN, A.M. Assistant Professor
GEORGE MORTON CHURCHILL, A.M. Instructor
LESLIE CLEVELAND MCNEMAR, A.B. Instructor
JOSEPH PLASS, A.M. Instructor
WILLIAM HAMILTON, Ph.D. Lecturer

First Section. Primarily for Undergraduates.

1. Mediæval History. A history of the settlement of the Germanic tribes in the territory of the Empire, with a study of feudal institutions through the movements of the Crusades; texts, with assigned readings. First half-year. *Mon., Wed., Fri.,* at 2.30. Professor SWISHER.

2. Mediæval History. A history of the evolution of national government through the periods of the Rennaissance and the Protestant Revolution; texts and assigned readings. Second half-year. *Mon., Wed., Fri.,* at 2.30.

3. Modern European History. A study of the European States under the new conditions resulting from the discovery of America and the opening of the oriental trade routes, extending through the period of the French Revolution; texts, lectures, and collateral readings. First half-year. *Mon., Wed., Fri.,* at 3.30. Professor SWISHER.

4. A continuation of the preceding through the revolutionary movements of the nineteenth century, with a more detailed study of recent issues; texts, lectures, and collateral readings. Second half-year. *Mon., Wed., Fri.,* at 3.30.

Second Section. For Undergraduates and Graduates.

23. European History, 1815 to 1870. Text-book, lectures, and reports on collateral reading. Besides the history of Europe proper much attention is given to matters of larger European interest, especially to colonization and international relations with reference to South America, Asia, and Africa. First half-year. *Mon., Wed., Fri.,* at 5.40 p. m. Mr. McNEMAR.

24. European History, 1870 to the present. Continuation of the preceding, studying the most recent developments with special attention to the forms of government, political questions, and current issues. Second half-year. *Mon., Wed., Fri.,* 5.40 p. m. Mr. McNEMAR.

25. English Constitutional History. A history of the evolution of parliamentary government, with incidental study of social and industrial development. *Tu., Th., Sat.,* 4.50. Mr. CHURCHILL.

26. American Political History. A general course in American History designed as a preparation for specialized work, or for students having a limited time to devote to the subject. Lectures, text-books, and reports upon assigned readings. *Tu., Th.,* at 2.30, with a third hour at the convenience of the instructor. Professor SWISHER.

30. American Constitutional History. A history of the origin and development of the Federal Constitution of 1789, with a study of its interpretation under the pressure of party issues, extending through the periods of division and reunion. Lectures, text-books, and collateral readings. *Mon.* and *Fri.,* at 4.50, in alternate years. Not given in 1911-12.

31. American Constitutional History since the Civil War. The constitutional results of the Civil War, as illustrated in the decisions of the Supreme Court during the past half century. *Tu.* and *Th.,* at 3.30, with an additional hour at the convenience of the instructor, in alternate years. Not given in 1911-12.

32. A History of Party Government. The development of the party system and the influence of party leaders and party issues in the United States; a research course based upon the study of political platforms and campaign literature. *Tu.* and *Th.,* at 4.50, with an additional hour at the convenience of the instructor. Professor SWISHER.

33. Current History. A discussion of political questions of the day, with special reference to their origin and historical significance. Lectures throughout the year. *Sat.,* at 11. Professor SWISHER.

Third Section. Primarily for Graduates.

44. Seminary Work. The results of individual research, conducted by graduate students upon assigned topics, will be discussed at the weekly meetings of the seminaries of American and Modern European History.

Undergraduate students properly qualified by previous study, who desire to do intensive work with a view to gaining fuller information

upon special periods or facility in the use of historical materials, may, with the approval of the instructor, be admitted to the historical seminaries.

SECTION II—INTERNATIONAL LAW AND DIPLOMACY.

CHARLES HERBERT STOCKTON, LL.D.....In charge of Department
CHARLES CLINTON SWISHER, LL.D.....Professor of History
LESLIE CLEVELAND MCNEMAR, A.B.....Instructor
JOHN BALL OSBORNE, A.M.....Lecturer

For Undergraduates and Graduates.

20. PRINCIPLES OF INTERNATIONAL LAW.—A detailed course in the nature, sources, and sanctions of International Law, based upon the study of cases and reports, supplemented by letters and assigned readings. Throughout year. *Mon., Wed., Fri.,* at 4.50 p. m. A series of lectures by President STOCKTON occupying about one-fourth of the class meetings, with text-book and case instruction by Mr. MCNEMAR during the remainder of the class hours.

21. THE ELEMENTS OF DIPLOMACY.—A study of the genesis and organization of the Department of State; the diplomatic service; diplomatic usage; negotiation of treaties; methods and traditional principles of our foreign policy. First half-year. *Tu., Th.,* 8 a. m. A series of discussions by occasional lecturers, directed by President STOCKTON.

22. THE CONSULAR SERVICE.—The history and development of the Consular Service of the United States; its present organization; the rights, duties, and methods of procedure of consular officers; the consular conventions of the United States; comparative study of modern consular establishments. Two hours, first half-year. *Tu., Fri.,* at 8 a. m. Mr. OSBORNE.

29. HISTORY OF AMERICAN DIPLOMACY.—A general history of American foreign relations from the Treaty with France in 1778, with a special study of some of the more important questions of American foreign policy. A research course with readings from treaties and diplomatic correspondence. Throughout the year. *Mon., Fri.,* 2.30 p. m. Professor SWISHER.

Primarily for Graduates.

44. CONFLICT OF LAWS OR PRIVATE INTERNATIONAL LAW.—A course dealing with private law in its international aspects. Among the topics treated are marriage and divorce, guardianship, wills, and the administration of estates, bankruptcy, and foreign judgments. Open only to students who have had instruction in the fundamental subjects of American Law. Four hours, second half-year. (Hours to be announced on Law Schedule.) —— ——.

MATHEMATICS.

HOWARD LINCOLN HODGKINS, Ph.D.....Professor
ASAPH HALL, JR., Ph.D.....Professor
H. GRANT HODGKINS, A.B.....Instructor

First Section. Primarily for Undergraduates.

3. Solid Geometry; College Algebra; Plane Trigonometry. *Mon., Wed., Fri.*, at 9. Professor HODGKINS.

4. Algebra; Plane Trigonometry. *Mon., Wed., Fri.*, at 5.40. Mr. HODGKINS.

6. Solid Geometry; College Algebra; Plane Trigonometry. *Tu., Th., Sat.*, at 5.40. Mr. HODGKINS.

9. Trigonometry; Analytic Geometry. *Mon., Wed., Fri.*, at 10. Professor HODGKINS.

12. Trigonometry; Analytic Geometry. *Mon., Wed., Fri.*, at 5.40. Professor HODGKINS.

Second Section. For Undergraduates and Graduates.

20. Differential and Integral Calculus; Elements of Differential Equations. *Tu., Th., Sat.*, at 4.50. Professor HODGKINS.

21. Differential and Integral Calculus; Elements of Differential Equations. *Tu., Th., Sat.*, at 9. Professor HODGKINS.

Third Section. Primarily for Graduates.

40. Differential Equations. Professor HODGKINS.

48. Celestial Mechanics. Theory of central forces; theory of parabolic and elliptic orbits. Lectures, with reading from the works of Gauss, Oppolzer, and Moulton. Professor HALL.

METEOROLOGY.

WILLIS LUTHER MOORE, D.Sc., LL.D.....Professor
WILLIAM JACKSON HUMPHREYS, Ph.D.....Professor

Third Section.

40. Applied Meteorology. Investigations of the underlying laws governing meteorological phenomena and of the methods employed in practice for their interpretation and applications. Professor MOORE.

41. Meteorological Physics. This course presupposes collegiate training in general physics. Particular attention will be given to the interpretation of meteorological phenomena in the light of modern physics; and those wishing to make this their principal study will be assisted in the selection of a suitable problem for investigation and advised in the collection of data necessary to its solution. Professor HUMPHREYS.

PHILOSOPHY, PSYCHOLOGY, AND EDUCATION.

WILLISTON SAMUEL HOUGH, Ph.M.....Professor
GEORGE LANSING RAYMOND, L.H.D.....Professor
WILLIAM CARL RUEDIGER, Ph.D.....Professor
WILLARD STANTON SMALL, Ph.D.....Lecturer
STEPHEN ELLIOTT KRAMER, A.M.....Lecturer
———— ————.....Laboratory Assistant

First Section. Primarily for Undergraduates.

1*a*. General Psychology. An introductory study of the principal facts and laws of the mental life. First half-year. *Mon., Wed., Fri.,* at 10.00. Professor HOUGH.

1*b*. General Psychology. Parallel with Course 1*a*. First half-year. *Mon., Wed., Fri.,* at 4.50. Professor HOUGH.

2*a*. Logic and Theory of Knowledge. Principles of deductive and inductive inference, followed by a study of the nature and structure of knowledge, its organization, and its relation to language. Second half-year. *Mon., Wed., Fri.,* at 10.00. Professor HOUGH.

2*b*. Logic and Theory of Knowledge. Parallel with Course 2*a*. Second half-year. *Mon., Wed., Fri.,* at 4.50. Professor HOUGH.

(Courses 1 and 2 are intended to satisfy the requirements in Psychology and Logic of Groups I, II, III, and V. They are introductory to the remaining courses in Philosophy and Education, and should be taken in the Sophomore year by students intending to pursue advanced courses or courses in Education. Courses 1*b* and 2*b* are given in alternate years. Given in 1911-12.)

3. General Psychology. Designed specially for teachers in service. *Tu., Th.,* at 3.50. Professor RUEDIGER.

(Normal School graduates and teachers of experience may take Course 3 instead of Courses 1 and 2 in satisfaction of the requirement in Psychology and Logic.)

Second Section. For Undergraduates and Graduates.

20. History of Philosophy. The chief epochs in the history of thought, with emphasis on their significance in the progress of civilization. Lectures, with assigned reading. First half-year. *Mon., Wed., Fri.,* at 11.00. Professor HOUGH.

21. Ethics. An introductory study of moral conduct. Second half-year. *Mon., Wed., Fri.,* at 11.00. Professor HOUGH.

(Courses 20 and 21 should be preceded by Courses 1 and 2, or 3, or an equivalent.)

22. Introduction to Philosophy. Lectures on the relation of philosophy to life and to the history of culture; and on the types of philo-

sophical theory, with special reference to modern systems. Assigned reading, and discussions. Open to those who have had General Psychology. *Th.*, at 4.50. Professor HOUGH.

23. Greek and Modern Ethics, with special reference to the problems of moral education. Critical reading of selected Dialogues of Plato and the Ethics of Aristotle (Peter's translation), with lectures on modern systems of ethics and on the principles of moral education. *Tu.*, at 4.50. Professor HOUGH.

24. History of Philosophy. The evolution of philosophic thought in relation to the progress of civilization and the interpretation of human life. Lectures, with collateral reading. *Tu., Th.*, at 4.50. Not given in 1911-12. Professor HOUGH.

25. Ethics. Seminary course. A critical study of the historical systems of morals. Lectures, reports upon assigned reading, and discussions. *Mon.*, 4.30-6.00. Credit, two hours. Not given in 1911-12. Professor HOUGH.

Third Section. Primarily for Graduates.

40. The Principles of Psychology. A seminary course for the advanced study of fundamental problems. Designed for graduates taking a major or minor in Psychology. Open to undergraduates who obtain the permission of the instructor. Hours to be arranged. Credit, two hours. Professor HOUGH.

43. Elements of Metaphysics. Selected fundamental problems. Designed for graduates taking a major in Philosophy. One hour. Professor HOUGH.

46. Aesthetics. Seminary Course. Aesthetics considered philosophically, historically, and practically. Conferences, prescribed readings, and thesis. Professor RAYMOND.

EDUCATION.

Courses 1 and 2 in General Psychology and Logic must precede, or be taken parallel with, the first course in Education; but Normal School graduates and teachers of experience may satisfy this requirement by taking Course 3 in General Psychology. The work in Education should begin either with the Principles of Education and of Teaching (Courses 21*a* and 21*b*), or with the History of Education (Course 22). Candidates for the Teacher's Diploma are required to complete before graduation Courses 20 or 21 (*a* and *b*); 22; 23 and 24, or 25; 30 (*a* and *b*), and 31. But teachers of experience may substitute an elective in Education, counting 2 units, for Course 31.

21*a*. Principles of Education. The basis, aims, values, and essential content of education as revealed by biological, psychological, socio-

logical, and ethical principles. First half-year. *Sat.*, 10-12. Professor RUEDIGER.

21*b*. Educational Psychology or Principles of Teaching. The fundamental principles underlying the teaching process as revealed by psychology and logic. Second half-year. *Tu., Th.*, at 4.50. Professor RUEDIGER.

(20*a* and *b*. The Principles of Education and of Teaching; a course parallel with the preceding. Not given in 1911-12. *Mon., Wed., Fri.*, at 9.00. Professor RUEDIGER.)

22. History of Education. A general course in the historical development of educational theory and practice. *Tu., Th.*, at 4.50. Professor RUEDIGER.

23. Child Study. The psychology, physiology, and hygiene of childhood and adolescence, with special reference to the problems of teaching. Kirkpatrick's *Fundamentals of Child Study*, supplemented by lectures, assigned reading, and reports. *Sat.*, 10 to 11. Dr. SMALL.

24. School Sanitation and Hygiene. A survey of the relations of education and health, including: The function of the school in promoting health; physical examination of children; medical inspection; physical education; diseases and defects incident to school life; the organization of instruction as related to fatigue; defective children; schoolhouse construction and sanitation. Lectures, reference work, and reports. *Sat.*, 11 to 12. Dr. SMALL.

25. Secondary Education. A practical course for actual or prospective high-school teachers, considering the history and function of American and foreign secondary education, and the values, essential content, and method of presentation, of the high school branches. *Mon., Fri.*, at 3.50. Not given in 1911-12. Professor RUEDIGER.

26. Elementary Education. The following topics will be considered: (*a*) Comparison of the German, French, English, and American elementary education; (*b*) the relation of the elementary school to society and to the high school; (*c*) ways and means of securing realness in teaching the various elementary school branches; (*d*) the development of initiative and self-reliance in the elementary school pupil. *Wed., Fri.*, at 3.50. Professor RUEDIGER.

(Courses 25 and 26 will be given in alternate years.)

27. School Administration. The public school system: Its development; economic and political relations; organization of administration, financial and educational; problems of administration. Lectures, assigned reading, and reports. One hour. Hour to be arranged. Dr. SMALL.

28. Experimental Education. After a brief introduction to the experimental investigation of sensation, movement, and association, this course will be devoted to experiments in educational psychology.

Among the topics to be investigated will be: habit formation; memorizing; the transfer of practice; the effectiveness of various motives in study; the effectiveness of different methods of presentation; the application of the Binet tests. *Mon.,* at 3.30-5.30, or at an hour to be arranged. Professor RUEDIGER.

29. Teaching Pupils to Study. A practical course on the development of initiative in thought and study. *Wed.,* at 3.50. Not given in 1911-12. Professor RUEDIGER.

30*a*. Class Management. A consideration of the practical problems of the class-room, including economy in class management, attendance, discipline, physical conditions, the daily program, and the technique of class instruction. Class discussions, lectures, and assigned readings. *Wed.,* 4.50. First half-year. Mr. KRAMER.

30*b*. School Supervision. A course involving the study of the relations of teachers to supervising officers, the principles of helpful criticism, the testing of class work, the conducting of teachers' meetings, and the rating of teachers. Class discussions, lectures, and assigned readings. *Wed.,* 4.50. Second half-year. Mr. KRAMER.

31*a*. Observation. Both the application of general educational principles and the methods of teaching particular subjects are systematically observed and discussed. First half-year. Two hours. Hours to be arranged. Professor RUEDIGER.

31*b*. Practice. The student-teacher is led in particular to form the connection between theory and practice and to establish right teaching habits. Second half-year. Two hours. Hours to be arranged. Professor RUEDIGER.

(Courses 26, 30, and 31 are open only to students registered in Teachers College.)

32. Adolescence. A consideration of the psychology of adolescence, with special reference to the problems of secondary education. Lectures, readings, and special topics. One hour. Not given in 1911-12. Dr. SMALL.

Third Section. Primarily for Graduates.

40. Research in Educational Psychology. Methods of investigation, followed by a review of typical studies. Each student will be expected to investigate and report upon some special topic. Two hours. Hours to be arranged. Professor RUEDIGER.

PHYSICS.

HOWARD LINCOLN HODGKINS, Ph.D.....Professor
PERLEY GILMAN NUTTING, Ph.D.....Assistant Professor
HAYNER HASKELL GORDON, Ph.D.,.....Instructor
FREDERICH WARREN GROVER, Ph.D.....Lecturer

First Section. Primarily for Undergraduates.

1. General Physics. A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experiments. This is a required course for Sophomores in Engineering, and may be elected by the general student who has had a college course in trigonometry. *Mon., Wed., Fri.,* at 4.50. Professor HODGKINS.

2. Laboratory Physics. A selected series of experiments, mainly quantitative. Two two-hour periods. *Tu., Th.,* at 10, or *Tu., Th.,* at 7.30. Professor HODGKINS and Dr. GORDON.

3. Introductory General Physics. A lecture and recitation course, similar to Course 1, but less mathematical, and planned with reference to the needs of the general student. *Mon., Wed., Fri.,* at 1.30. Professor HODGKINS.

Second Section. For Undergraduates and Graduates.

21. Heat. A lecture and laboratory course, based on Preston's Theory of Heat and Poynting and Thomson's Heat. Three periods. Not given in 1911-12.

22. Light. A lecture and laboratory course, based on Preston's Theory of Light and Schuster's Theory of Optics. Three periods. Not given in 1911-12.

Third Section. Primarily for Graduates.

45. Spectroscopy. An experimental study of the flame, arc, spark, and vacuum tube spectra of the chemical elements; variations in spectra produced by varying excitation; spectra of mixed gases and alloys; identification of elements; photography of spectra. Assistant Professor NUTTING.

46. Electricity, Inductance and Capacity. Their measurement and significance in electrical engineering and wireless telegraphy. No regular text-book will be followed, but reference will be made to the various scientific periodicals. The most convenient formulæ for the calculation of the self and mutual inductance of coils and the electrical capacity of condensers will be considered, together with practical methods for their accurate measurements. Much attention will be given to the discussion of the various forms of condensers and inductive coils in use and of their design. If the time should be sufficient, the question of the measurement of the fundamental electrical standard will be discussed. The lectures will be given if at least three (3) persons register for the course. Two hours. Dr. GROVER.

SECTION I—POLITICAL SCIENCE.

CHARLES NOBLE GREGORY, A.M., LL.D.....Professor of Law
BLAINE FREE MOORE, A.M.....Assistant Professor of Political Science
LESLIE CLEVELAND MCNEMAR, A.B.....Instructor
PAUL CHARLTON Lecturer

For Undergraduates.

20. ELEMENTS OF POLITICAL SCIENCE.—An introductory course in political science, dealing with the origin, nature, and functions of the State; the fundamental political concepts such as the State, sovereignty, government, law, civil liberty; the forms of State; the forms of government; distribution of the powers of government. Recommended as a prerequisite for the succeeding courses. Text-book and assigned reading. Three hours, first half-year. *Mon., Wed., Fri.,* at 4.50 p. m. Assistant Professor MOORE.

21. AMERICAN GOVERNMENT.—A general introductory course to American Government. The establishment of the Federal Constitution; a descriptive study and general survey of the nation and local governments. Text and assigned readings. Three hours, first half-year. *Mon., Wed., Fri.,* at 5.40 p. m. Assistant Professor MOORE.

22. NATIONAL GOVERNMENT.—A study of the national administration; the rights and duties of executive officers; an analysis of the workings of the executive departments; a brief discussion of Congress and the Judiciary. Lectures, text, and readings. Three hours, second half-year. *Mon., Wed., Fri.,* 5.40 p. m. Assistant Professor MOORE.

23. MUNICIPAL GOVERNMENT IN THE UNITED STATES.—A study of the organization and administration of city government in the United States with a limited comparative study of European conditions. The growth of cities; their relation to the State; powers and liabilities of municipal corporations; municipal problems such as those relating to local transportation, police, light and water supply, municipal ownership of public utilities. Three hours, first half-year. *Mon., Wed., Fri.,* 1.30 p. m. Assistant Professor MOORE.

24. MUNICIPAL GOVERNMENT IN EUROPE.—The legal position of the European City; its powers and liabilities; governmental organization and methods of administration; municipal problems in Europe and their treatment; municipal ownership. Three hours, second half-year. Not given in 1911–12. Assistant Professor MOORE.

25. EUROPEAN GOVERNMENTS.—A study of the organization and actual workings of the governments of France, Germany, Italy, Switzerland: a discussion of the executive, legislative, and judiciary and internal political conditions of each country. Lectures and assigned readings.

Three hours, second half-year. *Mon., Wed., Fri.,* at 1.30 p. m. Assistant Professor MOORE.

26. AMERICAN POLITICAL THEORIES.—A study of the development of American political ideas. Political theories of the colonial, the revolutionary, and the formative period; the growth of democratic ideas; political theories of the slavery and Civil War controversies; modern political theories in the United States. Two hours, second half-year. Given alternate years; not given in 1911–12. Mr. MCNEMAR.

27. POLITICAL PARTIES.—A study of the organization and methods of action of political parties in the United States. Growth of the party system; primary and convention system; permanent party organization; elements of cohesion in parties; reform movements and measures; theory of the party system. Prerequisites courses 20–21. Three hours, first semester. *Mon., Wed., Fri.,* at 9.00 a. m. Mr. MCNEMAR.

28. COMPARATIVE CONSTITUTIONAL LAW.—A comparative study of the constitutions and governmental forms of the United States, Great Britain, France, and Germany as representative types of modern constitutional government; a comparison of the constitutional powers of the more important Federal governments. Two hours, first half-year. Not given in 1911–12. Assistant Professor MOORE.

29. INTRODUCTION TO THE STUDY OF LAW.—An elementary course of lectures, with collateral reading, intended to assist the student beginning the study of law, and dealing with (1) the nature, scope, classification, and history of the law; (2) how and where to find the law, and (3) courts and procedure. Woodruff's Introduction to the Study of Law. Hours announced on law schedule. —— ——.

For Undergraduates and Graduates.

40. ADMINISTRATIVE LAW AND OFFICERS.—Administrative action; exercise of official powers; discretion; orders; enforcement; evidence. Judicial control; action against officers, municipal corporations, and the State; extraordinary legal remedies. Public officers; nature of office; eligibility; appointment, removal; execution of authority; liability. Freund's Cases on Administrative Law. Three hours, second half-year. *Mon., Wed., Fri.,* at 9.00 a. m. Mr. MCNEMAR.

41. PRIVATE RIGHTS AND IMMUNITIES UNDER THE CONSTITUTION.—An advanced course in Constitutional law—a study of cases showing the development of Federal protection of private rights and immunities; limitations on the powers of the States to deprive persons of life and liberty, to define and regulate the use of property, to impose taxes, to impair the obligation of contracts, etc. Two hours, second half-year. *Tu.,* 4.50 to 6.30 p. m. Assistant Professor MOORE.

42*a*. COLONIAL GOVERNMENT.—A historical review of the colonial system and policies of the world; reasons for colonial expansion; the

theory of the relationship between States and their colonies; the institutions and methods devised by the central government for colonial administration and control. Lectures and assigned readings. Two hours, first half-year. Given in alternate years; not given in 1911–12. Assistant Professor MOORE.

42*b*. COLONIAL ADMINISTRATION.—A study of the executive, legislative, and judicial organization and the administration of laws in existing colonies; an investigation of the industries, labor, and education in these colonies. The organization and administration of the insular possessions of the United States. Lectures and assigned readings. Two hours, second half-year. Given in alternate years. Not given in 1911–12. Mr. CHARLTON.

43. ROMAN LAW.—A comparison of some of the fundamental conceptions of the law of Rome and of the modern Civil Law with those of the Roman Law. Open only to students who have had instruction in American Law. Two hours, first half-year. Not given in 1911–12.

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45. SPANISH-AMERICAN LAW.—Giving an outline of the legal systems prevailing in Central and South America, in Cuba, Porto Rico, and the Philippine Islands, with emphasis upon their private laws, both civil and commercial, and their system of procedure. Open only to students who have had instruction in Roman Law. Lectures, assigned reading, and reports. Two hours, second half-year. Not given in 1911–12.

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Primarily for Graduates.

46. SEMINAR IN POLITICAL SCIENCE.—Students competent to undertake advanced work along special lines are admitted to this seminar for the presentation and discussion of essays on topics belonging to the field of political science proper. Hours and credit to be arranged. Assistant Professor MOORE.

PREVENTIVE MEDICINE.

GEORGE M. STERNBERG, M.D., LL.D.....Professor

Third Section. Primarily for Graduates.

40. Food preservatives in relation to the Public Health. The hygienic results of milk sterilization. The hygienic results of filtration of municipal water supplies. The use of chemical agents for the sterilization of water supplies, municipal or domestic. The results of legislative and philanthropic efforts to arrest the progress of tuberculosis in the United States, and especially in the principal cities.

ROMANCE LANGUAGES AND LITERATURES.

GEORGE NEELY HENNING, A.M.....Professor

FRENCH.

First Section. Primarily for Undergraduates.

1. Grammar, composition, drill in pronunciation. Fraser and Squair's French Grammar. Translation and reading of nineteenth century fiction and history. (400-500 pages.) For beginners. *Mon., Wed., Fri.,* at 11.00. Professor HENNING.

2. Parallel with Course 1. *Tu., Th., Sat.,* at 5.40. Professor HENNING.

4. Translation, reading, grammar, composition. Fraser and Squair's French Grammar. Mérimée, *Colomba;* other texts to be announced. Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French. *Tu., Th., Sat.,* at 4.50. Professor HENNING.

6. General survey of French literature, nineteenth to seventeenth centuries. Translation, collateral reading, and reports thereon, lectures on literature and the history of the language, composition. Open to students who have passed in Course 4, or have fulfilled the admission requirements in Advanced French. *Mon., Wed., Fri.,* at 3.30. Professor HENNING.

Second Section. For Undergraduates and Graduates.

Courses in this group are open to students who have passed in Course 6, or who otherwise satisfy the instructor of their fitness to take them.

21. Seventeenth century literature; history, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Descartes, Pascal, La Rochefoucauld, La Bruyère, Boileau, Saint-Simon, Mme. de Sévigné, Bossuet, Corneille, Racine, Molière, Fénelon, Malherbe, La Fontaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Thesis. Not given in 1911-12.

25. Nineteenth century literature; history, philosophy, criticism, memoirs, travels, fiction, drama, lyric poetry. Thierry, Michelet, Mignet, Thiers, Taine, Sainte-Beuve, Brunetière, France, Lemaître, Renan, Gautier, Mme. de Staël, Chateaubriand, Hugo, George Sand, Mérimée, Balzac, Flaubert, Daudet, Maupassant, Loti, Musset, Dumas fils, Augier, Maeterlinck, Rostand, Lamartine, Vigny, the Romantic poets, the Parnassians, the Symbolists, etc. Translations, collateral reading, and reports thereon, lectures on literature and history. Thesis. *Mon., Wed., Fri.,* 2.30. Professor HENNING.

Third Section. Primarily for Graduates.

47. The comedies of Molière. Professor HENNING.

50. The Romantic Movement in France, with some reference to the same movement in England and Germany. Professor HENNING.

Other courses may be arranged for competent graduates.

SPANISH.

(One of the following courses will be offered in 1911-1912.)

First Section. Primarily for Undergraduates.

1. Grammar, composition. Hills and Ford's Spanish Grammar. Translations and reading of nineteenth century fiction and drama. Open to first-year students only by permission of the instructor. Students may not elect Spanish and Italian in the same year. *Mon., Wed., Fri.,* at 10. Professor HENNING.

Second Section. For Undergraduates and Graduates.

20. Translation of modern prose and poetry, with much collateral reading. *Mon., Wed., Fri.,* at 10. Professor HENNING.

FEES.

ARTS AND SCIENCES.

1. Matriculation fee (payable once)	$5
2. Annual library fee	2
3. Tuition fee per annum for graduate courses leading to the degrees of M.A., M.S., C.E., E.E., M.E., Jur.D., and Ph.D...	150
Where candidates for higher degrees exceed the minimum time limit they may be liable for an additional charge of $40 per annum for each topic pursued by them.	
4. Tuition fee per annum for each hour per week of undergraduate courses leading to the degrees of B.A. and B.S., and for graduate courses leading to the degree of M.Dip	10
5. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, except for courses which do not begin with the terms	2
6. Tuition fee for each year of the regular four-year courses in any of the Colleges	150
7. Laboratory courses:	
Material fees:	
Mineralogy	5
Chemistry 2, 3, and 7; Electrical Engineering; Physics, each	10

Chemistry, 4 (Assaying)..... $20
Chemistry, except 2, 3, 4, 7, and 28, each..... 25

Deposits to cover breakage of apparatus issued, the amounts paid in excess of breakage to be returned:

Chemistry, 2, 3, 7, and 28, each..... 10
Chemistry, except 2, 3, 4, and 7, each..... 25

8. Fee for graduation..... 10
9. Tuition fee for the following special course, not taken by candidates for a degree..... 40
Chemistry, Course 4 (Assaying).
10. In determining tuition fees, three hours of laboratory work in Chemistry, and two hours of laboratory work in other subjects count as one hour.
11. Fee for certificate under the seal of the University..... 2

No change will be made in the fees fixed at the time of registration except in the case of a change in or withdrawal from a course of study, and then only upon notice in due form and from the end of the current month, when such change or withdrawal shall be approved. Applications for permission to change a course of studies or for the granting of a withdrawal should be made on the prescribed form to be obtained from the Dean, and will be received only at the end of a month.

PAYMENT OF FEES.

Matriculation, library, and other special fees, and laboratory deposits are due in full in advance. Tuition and laboratory material fees are due in eight monthly instalments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Treasurer of the University.

BOARD AND ROOMS.

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY,

The George Washington University,
Washington, D. C.

Professional Departments.

DEPARTMENT OF LAW.

FACULTY.

CHARLES HERBERT STOCKTON, LL.D. PRESIDENT OF THE UNIVERSITY
CHARLES NOBLE GREGORY, A.M., LL.M., LL.D..Professor of Law, Dean
MELVILLE CHURCH, LL.M.....Professor of the Law of Patents
WALTER COLLINS CLEPHANE, LL.M.....Professor of Law
EDWIN CHARLES BRANDENBURG, LL.M.....Professor of Law
ARTHUR PETER, LL.M.....Professor of Law
JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
WENDELL PHILLIPS STAFFORD, LL.D.....Professor of Law
JOSIAH ALEXANDER VAN ORSDEL, LL.D.....Professor of Law
JOHN WILMER LATIMER, LL.B.....Assistant Professor of Law
EVERETT FRASER, A.B., LL.B.....Assistant Professor of Law
HENRY CRAIG JONES, LL.B.....Assistant Professor of Law
ALFRED BUHRMAN.....Clerk of the Moot Court
JOSEPH RYLAND CURL, B.S.....Secretary of the Department of Law

COURT OF APPEALS.

WILLIAM F. MATTINGLY, LL.D.....Chief Justice
JOHN BELL LARNER, LL.D.....Associate Justice
STANTON JUDKINS PEELLE, LL.D.....Associate Justice

GENERAL STATEMENT.

This Department, established in 1865, is the oldest school of law in the city of Washington. Its course of instruction for the degree of Bachelor of Laws, originally requiring but two years, was gradually expanded, until, in 1898, in accordance with the recommendation of the American Bar Association, it was increased to three years. The Faculty has also shown a gradual increase in numbers commensurate with the expansion of the course and the growing number of students in attendance. Beginning with 1903, the Board of Trustees adopted the policy of placing most of the important topics of substantive law under the charge of trained professional teachers giving their whole time to the work of legal instruction. Those branches of the law connected with practice

will continue to be under the charge of professors who are actively engaged in the administration of the law either at the bar or on the bench.

In 1877 a year of graduate work, leading to the degree of Master of Laws, was added to the course of instruction offered. A special course in Patent Law was added in 1895.

In June, 1898, an ordinance was adopted by the Board of Trustees formally establishing as a separate department of the University the Department of Jurisprudence and Diplomacy. This Department was opened on November 15, 1898.

In 1904, by the authority of the Board of Trustees, a new adjustment of graduate work in the University was made, resulting in the establishment of the Departments of Law and of Politics and Diplomacy (now called the College of the Political Sciences), the former embracing the undergraduate and graduate courses in municipal law, and the latter graduate and undergraduate courses in the political sciences, special attention being given to diplomacy.

THE ADVANTAGES OF WASHINGTON FOR THE STUDY OF LAW.

To students of law, the peculiar advantages of Washington are manifest. The Supreme Court of the United States is in session during practically the entire school year. Students have the rare opportunity of hearing the arguments presented by leading American lawyers and the decisions of this high tribunal, which are delivered orally each Monday, upon the important legal questions which come before that court for final determination. Congress is in session during the winter, and here students see the practical workings of the largest and most important law-making body. The Department of Justice, the legal branch of the Federal Government, is also located in Washington. Besides the above there are also the United States Court of Claims, the United States Court of Customs Appeals, the United States Commerce Court, and the various local courts of the District of Columbia. The last-named courts exercise the unusual dual function of State and Federal courts. By means of attendance upon these courts students may familiarize themselves with all branches of legal procedure.

SEPARATE COURSES FOR ALL-DAY AND AFTERNOON STUDENTS.

Since 1903 the work of the Department of Law has gradually been transferred from the late afternoon hours to the forenoon, and at the present time the lectures offered to all-day students are largely confined to the earlier part of the day.

To meet the needs of those students whose employment in the Government service, or elsewhere, prevents their attendance before 4.30 in the afternoon, an afternoon course is given.

HOURS FOR LECTURES.

In the all-day course the larger part of the instruction is given between the hours of 9.00 a. m. and 1.00 p. m.

In the afternoon course the instruction is given between the hours of 4.50 and 6.30 p. m.

LOCATION.

The Department of Law is located on the fifth and sixth floors of the New Masonic Temple, corner of New York avenue, Thirteenth and H streets N. W., and is easily accessible from all parts of the city. The quarters are well equipped with commodious lecture rooms, moot court rooms, offices, the law library, and a students' room.

ACADEMIC YEAR.

The academic year extends through more than eight months, beginning on the last Wednesday in September and ending on the Wednesday following the Wednesday nearest the first day of June, and is divided into two half-years, the second half-year beginning on the first day of February. The session of 1911-12 begins on Wednesday, September 27, and closes Wednesday, June 5. Since a number of the courses given during the first half-year are completed before the beginning of the second half-year, it is possible for a student to enter on the 1st of February of any year and be graduated three years from that date, receiving his degree at the Winter Convocation, held on February 22, of each year.

Lectures begin promptly on the first day of the term, and students applying for admission at a later day will be admitted only upon showing good cause for the delay.

ADMISSION.

1. For the Degree of Bachelor of Laws.

Applicants for admission as candidates for the degree of Bachelor of Laws must be at least eighteen years of age and must have had educational training sufficient to satisfy the entrance requirements of the Department of Arts and Sciences of the University. In order to satisfy these requirements, which are set out at length in the General Catalogue of the University, students must present credits aggregating 15 units, which are broadly equivalent to a four years' high school course. Ap-

plicants for admission on certificate should secure formal certificates setting forth the credits claimed, and present these certificates attached to their application forms. All applications for admission should be addressed to the Secretary of the Department of Law, who will, upon request, furnish proper blanks and detailed information as to entrance examinations.

2. For the Degree of Master of Laws.

Candidates for the degree of Master of Laws must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools, of which this school is a member.

3. For the Course in Patent Law.

Only those students who are graduates of an approved law school or members of the bar in good standing will be admitted as students in the course in Patent Law.

4. Special Students.

Persons who for any reason do not qualify as candidates for a degree may, on the recommendation of the Faculty and with the assent of the professors whose courses they elect to take, be admitted as special students.

ADVANCED STANDING.

Students may be admitted to advanced standing in the second or third year classes upon satisfying the requirements for the work of the preceding year or years. These requirements may be met by presenting certificates from other law schools of accredited standing showing that the student has successfully completed equivalent courses, or by passing the regular examinations set for that purpose at the beginning of the term, after the student has shown that he has pursued a course of study in a law school in the subjects upon which he is examined, covering at least as many hours as are required for such subjects in this University. No credit is given for study pursued in a law office.

All examinations that may be required of applicants for advanced standing are held during the first week of each session.

METHOD OF INSTRUCTION.

Instruction in the class-room is based upon the study and discussion of cases. In some of the courses students are required to read parallel assignments in text-books.

In conducting the discussion of cases in the class-room every effort is made to lead the student to a clear understanding of the fundamental

legal principles that may be involved, and to afford him scientific training in accurate methods of study and of reasoning along legal lines.

Subjects involving the adjective law are in charge of professors who are engaged in active practice. The general principles of these subjects, taught in the same manner as indicated above, are developed by practice before the Moot Courts.

UNDERGRADUATE PROFESSIONAL COURSES.

Undergraduate students in Arts and Sciences upon the completion of forty-five units of credit may take the first year's work of the course for Bachelor of Laws, crediting them fifteen units, on the completion of which they may receive the academic degree.

COURSES OF INSTRUCTION.

A. LEADING TO THE DEGREE OF BACHELOR OF LAWS.

The course of instruction leading to the degree of Bachelor of Laws extends through a period of at least three years. A minimum of thirty-six hours' work is required of all candidates for this degree.

Students devoting their whole time to the study of law may, with the permission of the Dean, select additional subjects from the second and third years, provided the aggregate of the hours taken does not exceed fifteen a week. Such excess credits may be applied toward the degree of Master of Laws.

Students not devoting their whole time to the study of law are urged to devote more than three years to the completion of the course. In case of unsatisfactory work students are required so to extend the period of study.

FIRST YEAR SUBJECTS.

First Semester.

Contracts (A). Assistant Professor ———. Three hours a week. Williston's Cases on Contracts.

Criminal Law. Professor EARNEST. Two hours a week. Clark's Criminal Law and Mikell's Cases on Criminal Law.

Domestic Relations. Assistant Professor ————. Two hours a week. (Case-book to be announced.)

Property I (A). Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volume I.

Torts (A). Two hours a week. Ames & Smith's Cases on Torts.

Second Semester.

Agency. Assistant Professor ———. Three hours a week. Wambaugh's Cases on Agency.

Contracts (B). Three hours a week. Williston's Cases on Contracts.

Criminal Procedure. Professor EARNEST. One hour a week. Clark's Criminal Procedure and selected cases.

Property I (B). Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volumes II and III.

Torts (B). Two hours a week. Ames & Smith's Cases on Torts.

SECOND YEAR SUBJECTS.

First Semester.

Common Law Pleading and Practice. Professor CLEPHANE. Two hours a week. Tyler's Stephen on Pleading.

Corporations (A). Two hours a week. (Case-book to be announced.)

Equity I. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

Evidence (A). Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Property II. Assistant Professor FRASER. Four hours a week. Gray's Cases on Property, Volumes II and III.

Second Semester.

Corporations (B). Two hours a week. (Case-book to be announced.)

Equity II. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

Equity Pleading and Practice. Professor CLEPHANE. One hour a week. Thompson's Cases on Equity Pleading and Practice.

Evidence (B). Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Property III. Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volume V.

Quasi-contracts. Two hours a week. Scott's Cases on Quasi-contracts.

Sales. Three hours a week. Williston's Cases on Sales. (Not given in 1911-12 and in alternate years thereafter.)

THIRD YEAR SUBJECTS.

First Semester.

Bankruptcy. Professor BRANDENBURG. One hour a week.

Bills and Notes. Three hours a week. Huffcut's Negotiable Instruments: Statutes, Cases, and Authorities.

Brief Making. Assistant Professor LATIMER. One hour a week.

Conflict of Laws (A). Two hours a week. Lorenzen's Cases on Conflict of Laws.

Damages. Assistant Professor ———. Two hours a week. (Case-book to be announced.)

Insurance. Assistant Professor ———. Two hours a week. Wambaugh's Cases on Insurance.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week.

Patent Law. Professor CHURCH. Two hours a week.

Second Semester.

Conflict of Laws (B). Two hours a week. Lorenzen's Cases on Conflict of Laws.

Federal Procedure. Professor BRANDENBURG. One hour a week.

Legal Tactics and Ethics. Professor CLEPHANE. One hour a week.

Moot Court. Professors CLEPHANE, EARNEST, and PETER. Two hours a week.

Organization and Management of Corporations. Professor CLEPHANE. One hour a week. Clephane on the Organization and Management of Corporations.

Patent Law. Professor CHURCH. Two hours a week.

Preparation of Legal Instruments. Assistant Professor LATIMER. One hour a week.

Property III. Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volume V.

Suretyship. Two hours a week. Ames' Cases on Suretyship.

Partnership. Two hours a week. Gilmore's Cases on Partnership. (Not given in 1911-12 and in alternate years thereafter.)

Trusts. Assistant Professor ———. Three hours a week. Ames' Cases on Trusts.

Public Service Companies. Assistant Professor ———. Three hours a week. (Case-book to be announced.) (Not given in 1911-12 and in alternate years thereafter.)

Water Rights and Irrigation. Professor VAN ORSDEL. One hour a week. Long on Irrigation and assigned cases.

Mining Law. Professor VAN ORSDEL. One hour a week. (Not given in 1911-12 and in alternate years thereafter.)

Wills and Administration. Professor PETER. One hour a week.

Third Year students may elect also the following subjects given in the College of the Political Sciences:

Administrative Law. Mr. MCNEMAR. Two hours a week, second semester. Freund's Cases on Administrative Law.

Private Rights and Immunities under the Constitution. Assistant Professor MOORE. Two hours a week, second semester. Boyd's Cases on Constitutional Law and assigned reading.

B. LEADING TO THE DEGREE OF MASTER OF LAWS.

Students admitted as candidates for the degree of Master of Laws are required to elect subjects, not previously taken, covering a minimum of ten hours a week. These may be freely elected from the subjects offered by the Faculty of Law and from the following subjects given in the College of the Political Sciences:

International Law.
Comparative Constitutional Law.
Administrative Law.
Private Rights and Immunities under the Constitution.
Taxation.

Any excess credits obtained in this Law School in the course leading to the degree of Bachelor of Laws may be applied toward the Master's degree. The degree of Master of Laws will not be conferred, however, until one year after the receipt of the Bachelor's degree.

Advanced Practice.—Candidates for the Master's degree may also elect advanced practice work in the Moot Court, receiving therefor a credit of two hours for the year.

C. IN PATENT LAW.

A special course in Patent Law and Patent Law Practice is given by Professor Church. The purpose of this course is to prepare those taking it for practice in all matters involving the law of patents. The course extends throughout one year, with two lectures or sessions of the Moot Court each week. (For the admission requirements for this course, see Admission Requirements, *ante.*)

This course may be elected and counted by students toward the degree of Bachelor of Laws, and such students will be required to take only the first semester of the regular moot court work. A certificate, under the seal of the University, is granted to all students who complete this course.

COURSES IN PRACTICE.

A. MOOT COURT WORK.

1. *For the degree of Bachelor of Laws:*

Particular stress is laid upon moot court work. Aside from the practice court connected with the course in Patent Law, there are four courts in which undergraduate students pursue their work. Three of

these are *nisi prius* courts and are presided over by members of the Washington Bar in active practice. The fourth is a Court of Appeals to review the cases tried in the courts of first instance. This court is composed of the Chief Justice of the United States Court of Claims and of members of the Washington Bar.

Every third-year student before receiving the Bachelor's degree is required to prepare the pleadings in and prosecute to judgment the required number of cases in the *nisi prius* courts, with the privilege of appeal to the appellate tribunal. At least two hours in each week during the year must be spent by each third year student in active participation in moot court work in the court room to which he is assigned. Students electing Patent Law will be required, in view of the special moot court work in that course, to take only the first half-year of the regular moot court work.

Statements of facts are furnished, such as would be related to a lawyer in active practice by his client. Each student must determine whether or not upon such facts the particular case in hand is one of common law or equitable cognizance. He must then frame his pleadings, serve his writs, and answer his adversary's pleadings until issue is joined in legal manner, after which the case is brought on for hearing in strict accordance with the rules of actual practice. Juries are empaneled in accordance with settled legal procedure, witnesses are examined and cross-examined, and the case conducted through all the various stages of the trial or hearing down to and including the judgment or decree, after which, should the case be appealed, it must be carried through the appellate court, involving the preparation of the record on appeal, briefs of counsel, etc.

2. *For the degree of Master of Laws:*

The same facilities for moot court work as are described above are afforded in the course leading to the degree of Master of Laws. In this course, however, the nature of the cases assigned is somewhat different, involving, in addition to the ordinary cases at common law or in equity, cases of a special character, such as habeas corpus, certiorari, quo warranto, injunction, mandamus, extradition, replevin, attachment, etc. All candidates for this degree taking moot court work are required to carry through the appellate court each case assigned to them.

3. *Officers and Equipment:*

The clerk of the Moot Court is one of the assistant clerks of the Supreme Court of the District of Columbia, but his assistants in each court room are chosen from the student body, from whose ranks are also drawn the criers, jurors, and other officials, thus giving to the students the benefit of practice in administrative judicial machinery. The Moot Court is to all intents and purposes an actual court. The

rooms in which the sessions are held are fitted up with judges' benches, clerks' desks, jury boxes, and counsel tables, and from the time the crier announces that the court is in session until he announces its adjournment the procedure is identical with that of a regular judicial tribunal.

It is believed that any student who gives the proper attention to this feature of the law curriculum will be enabled to go out from this institution and creditably try cases in court, although he may never have been in an actual court room.

A careful record is kept of the work of each student, both as to his pleadings and his conduct of the case in court, and the ratings thus given determine, in connection with his ratings upon other subjects, whether or not he is entitled to a degree.

B. BRIEF MAKING.

In view of the rapidly increasing bulk of our case law, it becomes absolutely indispensable that students should be taught to find authorities in point, to collate them, and to present them to the court in a clear and concise form. In order to afford this training a course in Brief Making is given. This course will be conducted in part in the Library of the Department of Law, so that the use of the digests and reports may be illustrated.

C. PREPARATION OF LEGAL INSTRUMENTS.

Students are instructed in this course in the actual preparation of deeds, mortgages, wills, assignments, contracts, partnership agreements, and other legal instruments which a lawyer is called upon to prepare. Statements of facts are furnished to the class by the professor in charge, and each student is required to prepare the various forms of instruments. These are corrected by the professor and are discussed and criticised in class. Careful consideration is given to special forms of execution and acknowledgment when one of the parties to the instrument is a corporation, a partnership, a married woman, and the like.

D. LEGAL TACTICS AND ETHICS.

Every young lawyer entering upon his professional career is desirous of availing himself of the experience of an older practitioner and of learning many things which are not taught and cannot be taught from books. It is to meet the needs of this class of men that this course is given. It is in charge of a member of the Washington Bar whose practice has been an active one, extending over a period of many years.

A short introductory talk is given upon the relations between attorney and client, including the important subject of fees, after which the student is given the benefit of practical hints upon the manner of starting

in practice and opening and furnishing an office, with suggestions as to office systems.

The student is told how to listen intelligently to his client's grievances; how to draw up the pleadings arising out of these grievances; how to prepare for trial the case thus made, including the work of preparing the evidence; how to try the case and examine and cross-examine witnesses; the manner of making up the record, and conducting the argument on appeal, including the use of authorities in court. The Canons of Professional Ethics adopted by the American Bar Association are studied in this course. Practical instruction in Extraordinary Legal Remedies constitutes a part of this course.

EXAMINATIONS AND GRADES.

Regular Examinations:

Written examinations are held at the close of each semester. These examinations are final as to the work of that semester. All students, unless specially excused by the Dean, are required to take the regular examinations in the subjects pursued.

No student, except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the lectures and have done all the work required in the course of instruction upon that subject.

Grades:

At all examinations the grading of students will be indicated by the letters A, B, C, D, E, and F, representing, respectively, *excellent, good, satisfactory, fair, conditioned,* and *failed.*

Conditions:

A student receiving the grade of E (*conditioned*), in the regular examination in any course, will be given an opportunity to remove the condition by passing a subsequent examination with the grade of C or better.

The regular examinations for the removal of conditions will be held during the first week of each session. Applications for permission to take any of these examinations must be made to the Secretary of the Department of Law, in writing, not later than three days before the date for which the examination is scheduled. Candidates for the Bachelor's degree may, by action of the Faculty, be granted special examinations in not more than two subjects carried as conditions during the first semester of their last year, at the end of that semester, and in one subject carried as a condition during the second semester, at the end of that year.

A student receiving the grade of F (*failed*), in any examination, or the grade of D or E in any examination to pass off a condition in any course, will be required to take the course over again before being permitted to take another examination in such course.

Class Standing:

Students having conditions in more than two subjects will not be advanced from one class to another, nor will candidates for a degree be permitted to carry more than one condition into the second semester of the year in which they expect to be graduated. Students may have, however (subject to the provisions above enumerated), an opportunity to remove conditions, imposed during any session, by taking the regular examination for the removal of conditions at the beginning of the following session, for which no fee is charged.

Students having conditions in more than three subjects will not be allowed to register except upon special permission from the Dean.

Special Examinations:

No special examinations, other than those above provided for, will be granted to any students except those of the graduating class who, for good cause, shall have been excused by the Dean from taking any regular examination during the third year.

Attendance:

Regular attendance is required in all courses; and the examination grade of any student in any course may be withheld and the passing of another examination or the repetition of the course may be required on the sole ground of unsatisfactory attendance.

Election of Courses:

No student shall be allowed to register in courses aggregating more than fifteen hours during any one semester without first obtaining the permission of the Faculty.

Every student who is a candidate for graduation with the degree of Bachelor of Laws in his third year shall take and pass in each semester of his third year courses aggregating ten hours.

Election of courses to be taken must be made in all cases within ten days after the beginning of the semester in which such courses are given.

DEGREES.

1. Bachelor of Laws.

The degree of Bachelor of Laws will be conferred upon students who have studied law for a period of at least three years and passed satisfactory examinations upon subjects aggregating thirty-six hours, and

whose attendance and conduct have been satisfactory to the Faculty. The degree will not be conferred upon students deficient in Bills and Notes, Common Law Pleading and Practice, Contracts, Corporations, Equity I and II, Equity Pleading and Practice, Evidence, Moot Court, Property I, II and III, and Torts.

The degree of Bachelor of Laws *with distinction* will be awarded to students whose average percentage in all subjects is equivalent to the grade of A.

2. Master of Laws.

The degree of Master of Laws will be conferred upon students who have completed the work prescribed for this degree with the grade of C or better, and whose attendance and conduct have been satisfactory to the Faculty.

LAW LIBRARY AND READING-ROOM.

A well-equipped working library, comprising about 5,500 volumes, is open to the students from 9.00 a. m. to 10.00 p. m. Competent librarians are in charge and will give students assistance in looking up subjects and in the use of books.

The Library contains the standard text-books, the West Reporter System of Federal and State Decisions, State Reports, the English Common Law and Chancery Reports, Encyclopædias of Law, Digests, reference books, and current law publications.

In addition to these facilities, the students have free access to the Congressional Library and other public libraries.

PRIZES.

The Ordronaux Prize Scholarship.—A prize scholarship, known as "The Ordronaux Prize Scholarship," is awarded to that member of the Second Year Class taking the regular course, whether forenoon or afternoon, who shall during his first and second years attain the highest average grade. In determining the average grade of contestants the grade received in each subject shall be multiplied by the number of hours given to such subject and the sum of the results divided by the total number of hours. The recipient of this prize scholarship shall be entitled to receive credit for tuition fees to the extent of ten hours' work in his third year. Library and diploma fees will remain payable. The award of this scholarship is purely personal and will not be commuted to a cash payment, nor will it be transferable. The recipient of the scholarship must make use of the scholarship during the session next succeeding its award; otherwise, the same shall be awarded, upon like conditions, to the person having the next highest grade.

This scholarship, for the session 1910-11, was awarded to Scott Henry Lilly.

Edward Thompson Company Prize.—A prize offered by the Edward Thompson Company of a set of the Encyclopædia of Law, first or second edition, or a set of the Encyclopædia of Pleading and Practice, is awarded each year to the senior law student who shall write the best essay on some legal subject to be assigned by the Faculty. This prize will not be awarded, however, if the essays submitted do not possess sufficient merit.

Not awarded in 1910.

Ellsworth Prize.—A prize of $25 in gold, offered by Mr. Fritz von Briesen, called the "Ellsworth Prize," is awarded for the best work done by a regular student in the Patent Law Course.

Awarded in 1910 to John Woodward Milburn.

PUBLIC SPEAKING.

Excellent facilities for training in the art of public speaking are afforded by the two debating societies that have been organized in the Department of Law. These societies, known as the Columbian and Needham Debating Societies, meet weekly for debate. Membership in these societies is entirely optional, but their work is encouraged in every legitimate way by the Faculty, and students are urgently advised to take part in their exercises.

ADMISSION TO THE BAR OF THE DISTRICT OF COLUMBIA.

By the rules of the Supreme Court of the District of Columbia, applicants for admission to the Bar are required to have studied law for three years under the direction of a competent attorney, but by those rules the course in the Department of Law of the University is regarded as discharging this requirement.

FEES.

1. Matriculation fee (payable once)	$5
2. Annual library fee	3
3. Tuition fee per annum (except for Patent Law) for each hour taken per week	10
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms	2
5. Fee for graduation	10
6. Tuition fee for course in Patent Law	40
7. Fee for a certificate under the seal of the University	2

No change will be made in the fees fixed at the time of registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current month when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Secretary of the Department of Law.

The library fee will not be charged for the first half-year during which a course is completed in the case of students who enter at the beginning of the second half-year and pay the library fee for that year.

PAYMENT OF FEES.

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees are due in eight monthly instalments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Treasurer of the University.

BOARD AND ROOMS.

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY OF THE DEPARTMENT OF LAW,

The George Washington University,
Washington, D. C.

DEPARTMENT OF MEDICINE.

FACULTY.

The names are arranged in the several groups in the order of assignment.

PRESIDENT OF THE UNIVERSITY.

CHARLES HERBERT STOCKTON, LL.D.

Dean of the Department of Medicine.

WILLIAM CLINE BORDEN, M.D.,

Professor of Surgery.

Lieutenant-Colonel, Medical Corps, United States Army, Retired; *Surgeon-in-Chief to The George Washington University Hospital and Dispensary.*

1801 California St., N. W.

PROFESSORS, EMERITUS.

J. FORD THOMPSON, M.D.,

Professor of Surgery, Emeritus.

HENRY CRÈCY YARROW, M.D.,

Professor of Dermatology, Emeritus.

Dermatologist to The George Washington University Hospital.

926 17th St., N. W.

PROFESSORS.

A. F. A. KING, A.M., M.D., LL.D.,

Professor of Obstetrics and Dean Emeritus of the Faculty.

Consulting Physician, Children's Hospital; *Obstetrician-in-Chief to The George Washington University Hospital and Dispensary.*

1315 Massachusetts Ave., N. W.

GEORGE NICHOLAS ACKER, A.M., M.D.,

Professor of Pediatrics and Clinical Professor of Medicine.

Physician to the Children's Hospital; Consulting Physician to the Episcopal Eye, Ear and Throat Hospital, to the Lutheran Infirmary, to the Casualty Hospital, and to the Eastern Dispensary; *Pediatrician-in-Chief to the George Washington University Hospital and Dispensary.*

913 16th St., N. W.

D. KERFOOT SHUTE, A.M., M.D.,

Professor of Neuro-Anatomy and Clinical Professor of Ophthalmology.

Consulting Ophthalmologist, Government Hospital for the Insane; Ophthalmologist to Providence Hospital, Central Dispensary and Emergency Hospital, Columbia Hospital, and to the Washington Hospital for Foundlings; *Ophthalmologist to The George Washington University Hospital.*

1719 De Sales St.

STERLING RUFFIN, M.D.,

Professor of Medicine.

Visiting Physician to the Columbia Hospital for Women; Consulting Physician to the Government Hospital for the Insane; *Physician-in-Chief to The George Washington University Hospital and Dispensary.*

1335 Connecticut Ave.

WILLIAM K. BUTLER, A.M., M.D.,

Professor of Ophthalmology.

Ophthalmologist to the Garfield Memorial Hospital; Surgeon-in-Charge, Lutheran Eye, Ear and Throat Infirmary; *Ophthalmologist to The George Washington University Hospital.*

1207 M St., N. W.

CHARLES E. MUNROE, S.B., PH.D.,

Professor of Chemistry.

President American Chemical Society, 1898; President Washington Chemical Society, 1895; Vice-President of the American Association for the Advancement of Science, 1888; Fellow of the Chemical Society of London and of the Chemische Gesellschaft, Berlin; etc., etc.

2115 S St., N. W.

CHARLES WILLIAMSON RICHARDSON, M.D.,

Professor of Laryngology, Rhinology, and Otology.

Laryngologist to Providence Hospital, to the Episcopal Eye, Ear and Throat Hospital, and to the Washington Hospital for Foundlings; *Laryngologist-in-Chief to The George Washington Universiity Hospital.*

1317 Connecticut Ave.

J. WESLEY BOVÉE, M.D.

Professor of Gynecology.

Gynecologist to the Columbia Hospital for Women; Gynecological Surgeon, St. Elizabeth's Hospital for the Insane; *Gynecologist-in-Chief to The George Washington University Hospital and Dispensary.*

The Rochambeau

A. R. SHANDS, M.D.,

Professor of Orthopedic Surgery.

Orthopedic Surgeon to the Central Dispensary and Emergency Hospital; *Orthopedic Surgeon to The George Washington University Hospital and Dispensary.*

901 16th St., N. W.

FRANCIS R. HAGNER, M.D.,

Professor of Genito-Urinary Surgery and Venereal Diseases.

Genito-Urinary Surgeon to the Garfield Memorial Hospital; *Chief of the Genito-Urinary Clinic, The George Washington University Hospital and Dispensary.*

The Farragut

WILLIAM C. WOODWARD, LL.M., M.D.,

Professor of Medical Jurisprudence.

Health Officer, District of Columbia.

1766 Lanier Place, N. W.

WILLIAM A. WHITE, M.D.,

Professor of Psychiatry and Clinical Professor of Neurology.

Superintendent of the Government Hospital for the Insane, District of Columbia; Lecturer on Insanity, U. S. Army Medical School and U. S. Navy Medical School.

Government Hospital for the Insane.

I. W. BLACKBURN, M.D.,

Professor of Morbid Anatomy.

Pathologist to the Government Hospital for the Insane, District of Columbia.

Government Hospital for the Insane.

SHEPHERD IVORY FRANZ, A.B., PH.D.,

Professor of Physiology.

Psychologist to the Government Hospital for the Insane; Research Assistant, Carnegie Institute, Washington, D. C.

Government Hospital for the Insane.

D. W. PRENTISS, M.D.,

Professor of Hygiene.

1213 M St., N. W.

HURON W. LAWSON, M.S., M.D.,

Professor of Histology and Embryology.

Visiting Obstetrician to Freedmen's Hospital.

1117 Vermont Ave., N. W.

FREDERICK FULLER RUSSELL, M.D.,

Professor of Pathology and Bacteriology.

Major, Medical Corps, U. S. Army; Curator, Army Medical Museum; Instructor in Pathology and Bacteriology, U. S. Army Medical School; *Pathologist to The George Washington University Hospital and Dispensary* and to the Columbia Hospital for Women.

1928 Biltmore St., N. W.

B. M. RANDOLPH, M.D.,

Professor of Materia Medica and Therapeutics.

Associate Physician to The George Washington University Hospital, Attending Physician to The George Washington University Dispensary.

The Toronto.

CHARLES S. BUTLER, M.D.,

Professor of Tropical Diseases.

Surgeon, U. S. Navy; Instructor in Naval and Tropical Medicine, U. S. Naval Medical School.

1333 Harvard St., N. W.

RANDOLPH BRYAN CARMICHAEL, M.D.,

Professor of Dermatology.

Dermatologist to the Garfield Memorial Hospital, the Providence Hospital, the Washington Hospital for Foundlings, the Central Dispensary and Emergency Hospital; *Dermatologist to The George Washington University Hospital and Dispensary.*

818 17th St., N. W.

LOUIS A. La GARDE, M.D.,

Professor of Military Surgery.

Colonel, Medical Corps, U. S. Army; President of the U. S. Army Medical School.

2624 Woodley Place, N. W.

WM. CABELL MOORE, A.B., M.D.,

Professor of Anatomy.

Attending Physician to The George Washington University Dispensary; Assistant Physician, Dispensary Service, Central Dispensary and Emergency Hospital.

The Wyoming.

ASSOCIATE PROFESSORS.

JAMES DUDLEY MORGAN, A.B., M.D.,

Associate Professor of Medicine and Clinical Professor of Medicine.

Physician-in-Chief to the Emergency Hospital and Central Dispensary; Visiting Physician to the Garfield Memorial Hospital; Consulting Physician to the Government Hospital for the Insane.

919 15th St., N. W.

NOBLE P. BARNES, M.D.,

Associate Professor of Materia Medica and Therapeutics and Clinical Associate in Medicine.

Pediatrician to the Freedmen's Hospital and to the Eastern Dispensary and Casualty Hospital.

212 Maryland Ave., N. E.

CHARLES FRANKLIN CRAIG, M.D.,

Associate Professor of Pathology and Bacteriology.

Captain, Medical Corps, U. S. Army; Assistant Curator, Army Medical Museum; Instructor in Pathology and Bacteriology, U. S. Army Medical School.

1930 Biltmore St., N. W.

CLINICAL PROFESSORS.

THOMAS A. CLAYTOR, M.D.,

Clinical Professor of Medicine.

Visiting Physician to the Garfield Memorial Hospital and to the Tuberculosis Hospital of the District of Columbia.

1315 New Hampshire Ave.

ALBERT L. STAVELY, M.D.,

Clinical Professor of Gynecology.

Gynecologist to the Garfield Memorial Hospital.

1744 M St., N. W.

ARTHUR A. SNYDER, M.D.,

Clinical Professor of Surgery.

Attending Surgeon to the Garfield Memorial Hospital and to the Women's Clinic.

3051 N St., N. W.

JOHN R. WELLINGTON, M.D.,

Clinical Professor of Surgery.

Visiting Surgeon to the Garfield Memorial Hospital, to the Casualty Hospital and to the Children's Hospital; *Associate in Surgery to The George Washington University Hospital.*

1723 Connecticut Ave., N. W.

LUTHER H. REICHELDERFER, M.D.,

Clinical Professor of Surgery.

Attending Surgeon to the Garfield Memorial Hospital, and to the Hospital for Tuberculosis, District of Columbia.

1721 Connecticut Ave., N. W.

ASSOCIATES.

JOHN B. NICHOLS, M.D.,

Associate in Medicine and in Dietetics.

Pathologist to the Garfield Memorial Hospital and to the Episcopal Eye, Ear and Throat Hospital.

1321 Rhode Island Ave.

EDWARD F. MORSE, L.M., M.D.,

Associate in Obstetrics.

Obstetrician to the Providence Hospital and to the Freedmen's Hospital; *Associate in Obstetrics to The George Washington University Hospital and Dispensary.*

1539 I St., N. W.

EDWARD G. SEIBERT, M.D.,

Associate in Chemistry and Instructor in Laryngology and Ophthalmology.

Assistant Surgeon to the Lutheran Infirmary; *Associate in Laryngology and Ophthalmology to The George Washington University Hospital; Laryngologist and Ophthalmologist to the George Washington University Dispensary.*

916 14th St., N. W.

JULIAN M. CABELL, M.D.,

Associate in Obstetrics.

Associate in Obstetrics to Columbia Hospital for Women; *Associate in Obstetrics to The George Washington University Hospital and Dispensary.*

The Mansfield.

CHARLES STANLEY WHITE, M.D.,

Associate in Surgery.

Associate in Surgery to the Central Dispensary and Emergency Hospital; Assistant Coroner, District of Columbia; *Associate in Surgery to The George Washington University Hospital.*

The Farragut.

H. H. DONNALLY, A.M., M.D.,

Associate in Medicine and Clinical Associate in Pediatrics.

Attending Physician to the Home for Incurables; Member of the Dispensary Staff, Children's Hospital; *Associate in Medicine to The George Washington University Hospital.*

1018 14th St., N. W.

WM. F. M. SOWERS, A.B., M.D.,

Associate in Surgery.

Associate Surgeon to the Providence Hospital; Visiting Surgeon to the Washington Hospital for Foundlings and to the Freedmen's Hospital; *Associate in Surgery to The George Washington University Hospital.*

1707 Massachusetts Ave.

G. BROWN MILLER, B.S., M.D.,

Associate in Gynecology.

Attending Gynecologist to the Central Dispensary and Emergency Hospital; Associate Gynecologist to the Columbia Hospital for Women; *Associate in Gynecology to The George Washington University Hospital.*

1730 K St., N. W.

HENRY R. ELLIOTT, M.D.,

Associate in Physiology and Pharmacology.

Physician to the Central Dispensary and Emergency Hospital; *Assistant in Genito-Urinary Surgery to The George Washington University Hospital and Dispensary.*

The Farragut.

J. LEWIS RIGGLES, M.D.,

Associate in Anatomy and Gynecology.

Assistant Obstetrician to the Columbia Hospital for Women; *Attending Gynecologist to The George Washington University Dispensary.*

1224 K St., N. W.

HENRY J. NICHOLS, M.D.,

Associate in Bacteriology and Pathology.

Captain, Medical Corps, U. S. Army; Instructor in Pathology and Bacteriology, U. S. Army Medical School.

The Westmoreland.

WILBUR R. BRANDENBURG, M.D.,

Associate in Bacteriology and Pathology.

1101 14th St., N. W.

JOHN SWEYN NEATE, M.D.,

Associate in Pathology and Bacteriology.

Microscopist, Army Medical Museum; *Assistant Pathologist to The George Washington University Hospital* and to the Columbia Hospital.

1509 28th St., N. W.

W. W. WILKINSON, M.D.,

Associate in Medicine.

Assistant Pathologist to the Garfield Memorial Hospital.

The Rochambeau.

CLINICAL ASSOCIATES.

EDGAR P. COPELAND, M.D.,

Clinical Associate in Pediatrics.

Member of the Dispensary Staff of the Children's Hospital and of the Board of Medical Examiners of the District of Columbia; *Associate in Pediatrics to The George Washington University Hospital and Dispensary.*

The Rockingham.

JOHN T. KELLY, M.D.,

Clinical Associate in Obstetrics.

Gynecologist to Providence Hospital; Obstetrician-in-Chief to the Columbia Hospital for Women.

1312 15th St., N. W.

W. ASHBY FRANKLAND, M.D.,

Clinical Associate in Gynecology.

Gynecologist to the Casualty Hospital and Eastern Dispensary; *Attending Physician to The George Washington University Dispensary.*

The Champlain.

FRANK LEECH, M.D.,

Clinical Associate in Pediatrics.

Member of the Dispensary Staff of the Children's Hospital.

1372 Columbia Road, N. W.

INSTRUCTORS.

T. M. PRICE, PH.D.,

Instructor in Biochemistry.

The Iowa.

O. D. SWETT, M.S.,

Instructor in Chemistry.

Chevy Chase, Md.

WALTER H. MERRILL, M.D.,

Instructor in Electro-Therapeutics.

Radiographer to the Garfield Memorial Hospital; *Radiographer to The George Washington University Hospital and Dispensary.*

1913 14th St., N. W.

O. A. M. McKIMMIE, M.D.,

Instructor in Laryngology and Otology.

Associate Physician to the Episcopal Eye, Ear and Throat Hospital.

The Rockingham.

H. S. DYE, M.D.,

Instructor in Laryngology and Otology.

Assistant in Laryngology to the Central Dispensary and Emergency Hospital.

1327 L St., N. W.

TRUMAN ABBE, M.D.,

Instructor in Genito-Urinary Surgery.

Anaesthetist to the Columbia Hospital for Women; *Assistant, Genito-Urinary Service, The George Washington University Dispensary.*

1819 M St., N. W.

J. LAWN THOMPSON, M.D.,

Instructor in Surgery.

Attending Surgeon to The George Washington University Dispensary.

1112 New York Ave.

CHARLES W. HYDE, M.D.,

Instructor in Medicine.

Anaesthetist to The George Washington University Hospital.

The Plymouth.

ARTHUR L. HUNT, M.D.,

Instructor in Minor Surgery.

Anaesthetist to The George Washington University Hospital; Attending Surgeon to The George Washington University Dispensary.

The Burlington.

E. T. M. FRANKLIN, M.D.,

Instructor in Surgery.

Attending Surgeon to The George Washington University Dispensary.

1315 19th St., N. W.

W. J. FRENCH, M.D.,

Instructor in Pediatrics.

Assistant Pediatrician to the Central Dispensary and Emergency Hospital.

1736 18th St., N. W.

ADAM KEMBLE, M.D.,

Instructor in Gynecology.

Attending Gynecologist to The George Washington University Dispensary.

The Cecil.

VERGIL B. JACKSON, M.D.,

Instructor in Gynecology.

Assistant Surgeon to the Central Dispensary and Emergency Hospital; *Attending Gynecologist to The George Washington University Dispensary.*

The Brunswick.

SOTHORON KEY, M.D.,

Instructor in Medicine.

1716 H St., N. W.

H. G. FULLER, M.D.,

Instructor in Genito-Urinary Surgery and Venereal Diseases.

Assistant, Genito-Urinary Service, The George Washington University Hospital and Dispensary.

1615 Florida Ave., N. W.

CLINE CHIPMAN, M.D.,

Instructor in Minor Surgery.

Anaesthetist to The George Washington University Hospital.

629 G St., S. W.

GEORGE H. SCHWINN, M.D.,
Instructor in Psychiatry and Neurology.
Physician to the Government Hospital for the Insane.
Government Hospital for Insane.

HARRY W. MILLER, M.D.,
Instructor in Psychiatry and Neurology.
Physician to the Government Hospital for the Insane.
Government Hospital for Insane.

B. R. LOGIE, M.D.,
Instructor in Neurology.
Psychiatrist to the District of Columbia; *Director of The George Washington University Dispensary.*
1792 Columbia Road, N. W.

JOHN P. FILLEBROWN, M.D.,
Instructor in Physiology and Surgery.
Attending Surgeon to The George Washington University Dispensary.
Stoneleigh Court.

C. B. CONKLIN, M.D.,
Instructor in Medicine.
Attending Physician to The George Washington University Dispensary.
Rhode Island Ave. and 20th St., N. E.

C. AUGUSTUS SIMPSON, M.D.,
Instructor in Dermatology.
Attending Dermatologist to The George Washington University Dispensary.
The Burlington.

JOHN BRADFORD BRIGGS, B.S., M.D.,
Instructor in Pathology and Bacteriology.
1628 K St., N. W.

MILTON HAHN, M.D.,
Instructor in Pediatrics.
Attending Pediatrician to The George Washington University Dispensary.
1701 H St., N. W.

WILLIAM JOHNSTON MALLORY, M.D.,
Instructor in Medicine.
Attending Physician to The George Washington University Dispensary.
1720 Connecticut Ave., N. W.

ALBERT PERKINS TIBBETS, A.B., M.D.,

Instructor in Anatomy.

Assistant Surgeon, Surgical Clinic, Eastern Dispensary and Casualty Hospital.

1616 I St., N. W.

HARRY HYLAND KERR, M.D.,

Instructor in Surgery.

Surgeon to the Freedmen's Hospital and Assistant Surgeon to the Providence Hospital,

1742 N St., N. W.

ALEXANDER Y. P. GARNETT, M.D.,

Instructor in Obstetrics.

Obstetrician and Gynecologist, Episcopal Clinic; Physician, Outpatient Department, Providence Hospital.

1219 Connecticut Ave., N. W.

THE STAFF OF THE GEORGE WASHINGTON UNIVERSITY HOSPITAL AND DISPENSARY.

HOSPITAL.

STERLING RUFFIN, M.D.....*Physician-in-Chief*
GEORGE N. ACKER, M.D.,
H. H. DONNALLY, M.D.,
B. M. RANDOLPH, M.D., ...*Associate Physicians*
W. C. BORDEN, M.D.....*Surgeon-in-Chief*
C. S. WHITE, M.D.,
JOHN R. WELLINGTON, M.D.,
W. F. M. SOWERS, M.D., ...*Associate Surgeons*
A. R. SHANDS, M.D.....*Orthopedic Surgeon*
FRANCIS R. HAGNER, M.D.....*Genito-Urinary Surgeon*
HENRY R. ELLIOTT, M.D.,
HOMER G. FULLER, M.D., ...*Associate Genito-Urinary Surgeons*
J. WESLEY BOVÉE, M.D.....*Gynecologist-in-Chief*
G. BROWN MILLER, M.D.....*Associate Gynecologist*
A. F. A. KING, M.D.....*Obstetrician-in-Chief*
E. E. MORSE, M.D.,
J. M. CABELL, M.D., ...*Associate Obstetricians*
GEORGE N. ACKER, M.D.....*Pediatrician-in-Chief*
FRANK FREMONT-SMITH, M.D.,
E. P. COPELAND, M.D., ...*Associate Pediatricians*
HENRY C. YARROW, M.D.....*Dermatologist-in-Chief*
RANDOLPH B. CARMICHAEL, M.D.....*Associate Dermatologist*
CHAS. W. RICHARDSON, M.D.....*Laryngologist*
D. KERFOOT SHUTE, M.D.....*Ophthalmologist*
W. K. BUTLER, M.D.....*Ophthalmologist*
E. G. SEIBERT, M.D.....*Associate Laryngologist and Ophthalmologist*
WALTER H. MERRILL, M.D.....*Radiographer*
F. F. RUSSELL, M.D.....*Pathologist-in-Chief*
J. S. NEATE, M.D.....*Associate Pathologist*
CHARLES W. HYDE, M.D.,
ARTHUR L. HUNT, M.D.,
CLINE CHIPMAN, M.D., ...*Anaesthetists*
J. P. FREY, M.D.....*Resident Physician*
R. H. DUENNER, M.D.....*Assistant Resident Physician*
E. G. BAUM, M.D.....*Assistant Resident Physician*
W. A. H. PAIGE, M.D.....*Assistant Resident Physician*
C. LE R. BROCK, M.D.....*Assistant Resident Physician*
G. Q. EPPARD, M.D.....*Assistant Resident Physician*
J. L. LEAR.....*Pharmacist and Extern*
G. A. SCHAUB.....*Extern*
L. A. LA GARDE, JR.....*Extern*
A. E. PAGAN.....*Extern*
J. C. ECKHARDT.....*Extern*
Miss B. B. THOMPSON...*Superintendent of Nurses and Principal of the Training School for Nurses*

DISPENSARY.

A. F. A. King, M. D.....*Obstetrician-in-Chief*
Sterling Ruffin, M.D.....*Physician-in-Chief*
J. Wesley Bovée, M.D.....*Gynecologist-in-Chief*
Wm. C. Borden, M.D.....*Surgeon-in-Chief*
Benj. R. Logie, M.D.....*Director of the Dispensary*

General Medicine.

B. M. Randolph, M.D.,
W. A. Frankland, M.D.,
W. C. Moore, M.D.,
C. B. Conklin, M.D.,
W. J. Mallory, M.D., }*Attending Physicians*

General Surgery.

J. Lawn Thompson, M.D.,
A. L. Hunt, M.D.,
E. T. M. Franklin, M.D.,
J. P. Fillebrown, M.D., }*Attending Surgeons*

Genito-Urinary Diseases.

Francis R. Hagner, M.D.....*Genito-Urinary Surgeon*
Henry R. Elliott, M.D.,
Homer G. Fuller, M.D.,
Truman Abbe, M.D., }*Associates*

Gynecology.

J. L. Riggles, M.D.,
V. B. Jackson, M.D.,
Adam Kemble, M.D., }*Attending Gynecologists*

Obstetrics.

E. E. Morse, M.D.,
J. M. Cabell, M.D., }*Obstetricians*

Eye, Ear, Throat, and Nose.

E. G. Seibert, M.D.....*Laryngologist and Ophthalmologist*
C. C. Ammerman, M.D.....*Asst. Laryngologist and Ophthalmologist*

Neurology.

B. R. Logie, M.D.....*Neurologist*

Electro-Therapeutics.

W. H. Merrill, M.D.....*Electro-Therapeutist*

Dermatology.

C. A. Simpson, M.D.....*Attending Dermatologist*

Pediatrics.

Milton Hahn, M.D.....*Attending Pediatrician*

HISTORICAL.

The **Department of Medicine of the George Washington University,** in the chronological order of establishment, is the seventeenth Medical School in the United States. The first course of lectures began in March, 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

When first established, and for many years thereafter, this school, like most others in this country, gave only a two years' course of five months each. In 1878 the course was lengthened by the establishment of a Spring Session, devoted to lectures in certain special subjects. In 1879 the course was lengthened to seven months and attendance upon three annual sessions required, and in 1893 attendance on four annual courses was made obligatory upon all candidates for the degree of Doctor of Medicine. In order to increase the facilities for actual bedside teaching, the University Hospital and the University Dispensary were established in 1898 and made a part of the Department of Medicine. In 1902 the old Medical College building, in which the exercises had been held since 1867, gave place to the present large and commodious structure.

EDUCATIONAL POSITION.

The Medical Department of the University has been for several years a member of the Association of American Medical Colleges. It is one of Medical Colleges designated as "acceptable, class A," by the American Medical Association, and it is accredited for all its work by the Combined (Royal) Medical Examining Boards in England.

These facts guarantee the character of the work done by the College and insures its students and graduates all the advantages which accrue from such association and recognition.

BUILDINGS AND OTHER FACILITIES.

The **Buildings of the Medical Department** adjoin each other and consist of the Medical College Building and the University Hospital and the University Dispensary. They are most advantageously situated in the heart of the city near both systems of car lines. As the Hospital and Dispensary adjoin the College, their clinical facilities are easily accessable to the students, and the pathological material and the material for clinical microscopy and clinical chemistry afforded by the Hospital and Dispensary are directly used in the College laboratories.

The **Medical College Building** is a modern, commodious, five-story structure, with spacious, well-lighted, well-ventilated lecture and

class rooms, laboratories, and students' rooms. It has an elevator service, and is equipped throughout with steam heat, gas, electricity, and all modern improvements.

The **Laboratories,** five in number (for anatomy, chemistry, histology and embryology, physiology and pharmacology, and bacteriology and pathology), are fully equipped with the most approved appliances, so that students may adequately pursue the laboratory courses and acquire the technical skill necessary in modern clinical and research methods.

The **University Medical Library** is open for study and consultation from 9 a. m. to 9 p. m. It contains at present more than 3,000 volumes, and provision is made to add to it as published the important new works on medicine. The most important medical periodicals are regularly received. The Library is an excellent working collection, as it affords opportunity to adequately read up on the subjects presented in the courses.

The **Pathological Museum** contains a great many valuable and interesting specimens. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

ADVANTAGES OF LOCATION.

The **advantages of Washington** *as a place for pursuing the study of medicine are many.* This city now has nearly four hundred thousand inhabitants, providing abundant clinical material to the hospitals, which have an aggregate of over three thousand beds. In these hospitals clinical instruction, in addition to that in the University Hospital, is given by members of the Faculty.

The *great libraries* and *museums* connected with the various Government institutions afford unparalleled facilities for study.

The Library of the Surgeon General's Office of the United States Army is the most complete medical library in the world. All the facilities of this great library are open to medical students. There is also the Library of Congress, the Public Library, and the many excellent libraries of the various Government offices, all of which are open to students.

The *Army Medical Museum* affords an unrivaled opportunity for studying the conditions met with in military and general surgery. It contains on exhibition a collection of anatomical and pathological specimens unequalled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy and the National Museum which contains the most complete and best arranged collection of materia medica in the world. The drugs are shown in all their processes of manufacture. The Botanic

Gardens, the Smithsonian Institution, the Fish Commission, the Department of Agriculture, all afford opportunities for study both in medicine and its collateral sciences.

On account of the many advantages offered in this city, the *Army and Navy Medical Schools* have been here located. The Alumni of this College are largely represented in all public services, and have been highly successful in passing the rigid examinations by them. Ten per cent of the total number of the regular medical corps of the United States Army are graduates of this College.

Aside from the special advantages offered for the study of medicine, the cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is the seat of the General Government, are broad and national, make it an ideal place for a medical student to pass his four years of study.

ADMISSION.

The requirements for admission are those of the Association of American Medical Colleges, and are as follows:

Candidates for matriculation must present creditable certificates of good moral character from two physicians in good standing.

The educational requirements for admission are—

(*a*) A Bachelor's degree from an approved college or university.

(*b*) A diploma from an accredited high school, normal school, or academy requiring for admission evidence of the completion of an eight-year course in primary and intermediate grades; and for graduation not less than four years of study.

(*c*) Candidates not having a Bachelor's degree or a diploma from an accredited high school or academy may be admitted upon passing an examination in the following branches:

1. Required (18 points); Mathematics (4 points); English (4 points); History (2 points); Language (4 points—Latin, French, German); Science (taken from physics, chemistry, botany, zoölogy), 4 points.

2. Optional (to 12 points taken from); English (4 points); History (6 points); Language (6 points); Manual Training (2 points); Mechanical Drawing (1 point); Natural Science (botany, biology, and zoölogy, 2 points each); Astronomy, Civics, Geology, Physical Geography, Physiology and Hygiene, Political Economy (2 points each).

These examinations are conducted by the University, and will be held in the latter part of May and September. Candidates desiring examination must submit their certificates of character to the Dean before the first of the month in which they desire to be examined.

Certificates from reputable instructors recognized by the State Board of Medical Examiners duly authorized by law or by the Superintendent

of public instruction in States having no examining board may be accepted in lieu of any part of the examination.

A student may be allowed to enter on his medical work conditioned in not more than six points, and these conditions must be removed by satisfactory examination before he is allowed to enter on the second year of his medical course.

(One point in any subject in a high school or academic course demands not less than five periods per week of forty-five minutes each for eighteen weeks.)

As the laws relating to the preliminary educational qualifications required of physicians differ in many of the States of the Union, candidates are advised to make themselves familiar with the provisions of the medical statutes of the States in which they contemplate applying for license to practice. Attention to this precaution may save future embarrassment.

ADMISSION OF STUDENTS FROM OTHER SCHOOLS.

Students who have attended one or more terms at any other medical college in good standing, and who have the necessary preliminary educational requirements, may be admitted to advanced standing upon passing the examination required of students for the stage at which they propose to enter, or upon presenting certificates of examination covering courses equal to those in this College.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted as special students without examination to pursue any course they may elect.

ACADEMIC YEAR.

The **Academic Year** begins on the last Wednesday in September and ends on the first Wednesday in June. It is divided into two semesters of four months each.

The term of study for the degree of Doctor of Medicine consists of four years of eight months each. The next session, the ninety-first, begins September 27, 1911, and ends June 5, 1912.

Students must register promptly at the beginning of the session, in order that their time of study shall count as a full year.

Degrees are conferred at Commencement, the second Wednesday in June.

Optional Five-Year Course.

Since the session of 1904-05 a five-year optional course has been offered for the benefit of students. Students in this course take their subjects with the regular four-year classes, but as they take fewer subjects each year, they are able to devote more time to each study.

SYSTEM OF INSTRUCTION.

Instruction is carried on by laboratory work, recitations, lectures, bedside instruction, and hospital and dispensary clinics. Particular stress is laid upon laboratory work and clinical teaching. The clinical material of the University Hospital and Dispensary is utilized to the fullest extent, as the Hospital, the Dispensary, and the Medical College are under the same control. Additional clinics are given in other hospitals in the city to which members of the faculty are attached.

While the greatest stress is laid upon laboratory work and clinical teaching, it is recognized that the facts so obtained must be correlated and shown in their due relation to each other and to the science of medicine. To this end didactic lectures are maintained in certain branches, as they have been found necessary to give a systematic and comprehensive idea of the larger subjects in medicine. These lectures are followed by systematic and thorough quizzes, so that it may be certain that the students properly and thoroughly grasp the ideas presented by the lecturers.

The recitation and quiz work is made so complete that students do not need to employ private quizmasters.

The object sought throughout the courses is to thoroughly ground the students in the knowledge which is necessary to the practitioner of medicine. No particular attempt is made to graduate specialists in any subject. It is believed that the four years allowed are no more than sufficient time for the adequate preparation of the general practitioner.

The policy adopted by the College is to give a comprehensive, well-graded, and well-proportioned course—one that will adequately prepare the graduate to practice general medicine and meet the requirements of State Boards.

ORDER OF INSTRUCTION.

The subjects studied in each year are shown in the following table. Major subjects are in italics:

First Year.	Second Year.	Third Year.	Fourth Year.
Anatomy.	*Organic* and *Physiological Chemistry.*	*Medicine.*	*Medicine.*
Histology.	*Pathology.*	*Surgery.*	Case Teaching.
Embryology.	*Bacteriology.*	Surgical Pathology.	*Surgery.*
Physiology.	Clinical Microscopy.	Fractures and Dislocations.	Orthopœdics.
General Chemistry.	Topographical Anatomy	*Obstetrics.*	Genito-Urinary Diseases.
	Materia Medica.	*Therapeutics.*	Operative Surgery.
	Pharmacology.	Electro-Therapeutics.	*Obstetrics.*
	Minor Surgery.	*Gynecology.*	*Gynecology.*
	Physical Diagnosis.	Medical Jurisprudence.	Laryngology and Otology.
	Pathological Physiology.	Applied Anatomy.	Ophthalmology.
		Clinical Chemistry.	Applied Anatomy.
		Hygiene.	Dermatology.
		Dietetics.	Psychiatry.
		Clinics.	Pediatrics.
			Neurology.
			Tropical Diseases.
			Clinics.

The greater part of the fourth year is devoted to clinical work in the hospitals. During this year, however, general instruction is also given in Mental Diseases, Neurology, Dermatology, Ophthalmology, Laryngology, and Otology. Not less than 1,000 hours of clinical work are required.

ANATOMY.

WM. CABELL MOORE, A.M., M.D.....Professor of Anatomy
D. KERFOOT SHUTE, M.D.....Professor of Neuro-Anatomy
J. L. RIGGLES, M.D.....Associate in Anatomy
ALBERT P. TIBBETS, A.B., M.D.....Instructor in Anatomy

During the first year the course in Anatomy is given mainly by practical laboratory work. Each student is required to dissect satisfactorily the lateral half of a cadaver. The dissecting-room work is supplemented by demonstrations, recitations, and lectures, illustrated by lantern slides, models, and diagrams.

Throughout the course every opportunity is taken to emphasize the application of anatomy to the practice of medicine in all its departments.

Osteology and Syndesmology are taught by recitations and demonstrations at the beginning of the course, preparatory to the more advanced studies in Anatomy.

In the second year a course in Topographical Anatomy is given, in which recitations and laboratory demonstrations are used to thoroughly familiarize the student with the subject. In the fourth year a course is given in the general application of Anatomy to Medicine and Surgery. In this way a thorough preparation in general and applied anatomy is given.

First Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Gross Anatomy	120	360	480
Second Year.			
Topographical Anatomy	20	60	80
Fourth Year.			
Applied Anatomy	16	...	16
Totals	156	420	576

HISTOLOGY AND EMBRYOLOGY.

H. W. Lawson, M.S., M.D....Professor of Histology and Embryology

Instruction is given in the care and use of the microscope and in the preparation of tissues for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by recitations.

First Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Histology	32	96	128
Embryology	16	48	64
Totals	48	144	192

PHYSIOLOGY.

Shepherd Ivory Franz, Ph. D.....Professor of Physiology
Henry R. Elliott, M.D.....Associate in Physiology
John P. Fillebrown, M.D.....Instructor in Physiology

The course in Physiology consists of lectures, recitations, conferences, demonstrations, and laboratory exercises, during the second half of the

first year. The lectures cover all the important facts and theories regarding bodily functions, and are illustrated by diagrams, models, and prepared specimens. Recitations are held on assigned parts of the text-book. Conferences are held on special physiological topics, and for these exercises each student is required to prepare one thesis during the semester. In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of muscle and nerve, on the nervous system, and on the special senses. The student is required to make and keep records of the experiments, and these are criticised by the instructors. The class is divided into sections, so that each student receives a large amount of personal attention. In the second year a series of exercises is held in which special emphasis is laid on the relation of normal physiological function to the disturbances of function in disease, and upon the physiological action of drugs. It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with succeeding courses in Pathology, Therapeutics, and General Medicine.

First Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Physiology	48	192	240
Second Year.			
Pathological Physiology	...	16	16
Totals	48	208	256

CHEMISTRY.

Charles E. Munroe, Ph.D.....Professor of Chemistry and Toxicology
Edward G. Seibert, M.D.....Associate in Chemistry
Thomas M. Price, Ph.D.....Instructor in Biochemistry
Otis D. Swett, B.S.....Instructor in Chemistry

General Chemistry. A series of illustrated lectures accompanied by recitations, laboratory work, and exercises, on theoretical, inorganic, organic, and technical chemistry.

Organic Chemistry. A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

Physiological Chemistry. A series of lectures, laboratory work, and recitations on the proximate principles of the human body.

Biochemistry. A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the

products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vito*. DR. PRICE.

Clinical Chemistry. A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

First Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
General Chemistry	96	96	192
Second Year.			
Organic Chemistry	64	56	120
Physiological Chemistry	24	56	80
Third Year.			
Clinical Chemistry	...	24	24
Totals	184	208	416

MATERIA MEDICA AND THERAPEUTICS.

B. M. RANDOLPH, M.D.....Professor of Materia Medica and Therapeutics
NOBLE P. BARNES, M.D.....Associate Professor of Materia Medica and Therapeutics
HENRY R. ELLIOTT, M.D.....Associate in Pharmacology
WALTER H. MERRILL, M.D.....Instructor in Electro-Therapeutics

Second year. (1) Lectures upon Materia Medica, including a demonstration of drugs and their preparations. (2) Recitations upon the preparations, their doses, and the various antidotes for poisons. (3) Practical exercises in prescription writing. (4) Demonstrations of drugs.

Third year. (1) Systematic lectures upon the physiological action of drugs and their effects in health and disease, their therapeutic uses, and their methods of administration. (2) Lectures and section demonstrations in electro-therapeutics. (3) Prescription writing, in which the students are given hypothetical cases for which to prescribe, the prescriptions being reported before the class for criticism and discussion.

Second Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Pharmacology	...	64	64
Materia Medica and Toxicology	160	...	160

Third Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Therapeutics	64	...	64
Electro-Therapeutics	16	16	32
Totals	240	80	320

DIETETICS.

J. B. Nichols, M.D.....Associate in Medicine

A course of lectures and quizzes on the principles of feeding in health and disease.

Third Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Dietetics	...	32	32

PATHOLOGY AND BACTERIOLOGY.

Frederick F. Russell, M.D....Professor of Pathology and Bacteriology
C. F. Craig, M.D....Associate Professor of Pathology and Bacteriology
H. J. Nichols, M.D.....Associate in Pathology and Bacteriology
W. R. Brandenburg, M.D.....Associate in Pathology and Bacteriology
J. S. Neate, M.D.....Associate in Pathology and Bacteriology
J. B. Briggs, M.D.....Associate in Pathology and Bacteriology

Bacteriology.—The first part of the session is devoted to a laboratory course of instruction in the fundamental principles and methods of pure bacteriology. A thorough drilling is given in the preparation of culture media, in sterilization and disinfection, staining, and in the several methods of differentiating bacteria.

Pathology.—The course in Pathology comprises general and special pathology and clinical microscopy. Post-mortem examinations will be utilized when possible. Coincidentally with the above is included the study of the principal pathogenic bacteria: the principles of immunity and serum therapy.

The course of instruction in special pathology will include the study of those processes requiring surgical relief; the healing of wounds and other injuries; of special diseases, neoplasms, and problems of experimental pathology.

The course in Clinical Microscopy comprises the study and examination of various tissues, fluids, and material from the standpoint of diagnosis.

Second Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Bacteriology	45	135	180
Pathology	40	200	240
Clinical Microscopy	...	72	72
Totals	85	407	492

MORBID ANATOMY.

I. W. Blackburn, M.D.....Professor of Morbid Anatomy

The instruction in this course is mainly practical, consisting of post-mortem examinations, demonstrations, and illustrative lectures pertaining to the subjects of morbid anatomy and special pathology. Especial attention is paid to the study of the gross pathology of diseases of the brain and nervous system. Instruction in the technique of post-mortem examinations for scientific purposes and in medico-legal cases is a feature of the course.

Fourth Year.

	Hours.		
	Lect., Rec., Dem.	Lab.	Total.
Morbid Anatomy	20	...	20

MEDICINE.

Sterling Ruffin, M.D.....Professor of Medicine
Geo. N. Acker, A.M., M.D.....Clinical Professor of Medicine
Thos. A. Claytor, M.D.....Clinical Professor of Medicine
C. S. Butler, M.D., Surg. U.S.N.....Professor of Tropical Diseases
James Dudley Morgan, A.B., M.D....Associate Professor of Medicine and Clinical Professor of Medicine
J. B. Nichols, M.D.....Associate in Medicine
H. H. Donnally, A.M., M.D.....Associate in Medicine
W. A. Frankland, M.D.....Clinical Associate in Medicine
W. W. Wilkinson, M.D.....Associate in Medicine
Charles W. Hyde, M.D.....Instructor in Medicine
Sothoron Key, M.D.....Instructor in Medicine
C. B. Conklin, M.D.....Instructor in Medicine
Wm. J. Mallory, M.D.....Instructor in Medicine

Instruction in Medicine is so given as to conform to the most modern requirements. The work begins in the second year with a complete course in history-taking and normal physical diagnosis, and is continued

through the third and fourth years. During the latter two years the course consists of lectures, recitations, a study of case histories, clinical conferences, and practical work in the clinical laboratory and at the bedside. The work is made as practical as possible.

The third-year class is divided into small sections, which are required to attend the daily dispensary service in the University Hospital, where they are drilled especially in history-taking and in the technique of practical physical diagnosis.

The fourth-year class is similarly divided into small sections, and these are required to attend the daily ward clinics in the University Hospital and ward clinics in the Garfield Memorial Hospital, Children's Hospital, and the Tuberculosis Hospital of the District of Columbia.

The system of ward clinics to small groups of students affords a most effective method of studying disease and gives to every student an opportunity of following a large assortment of diseases from their commencement to the termination of illness; in no other way is it possible to get a more practical knowledge of the methods of studying disease or a more intimate knowledge of disease itself.

Every patient in the medical wards of the University Hospital is assigned to one, or at most two, senior students, who are required (under proper supervision) to take the history, to make and record a complete physical examination, to determine after due study the nature of the illness (diagnosis), to outline a plan of treatment, and to make daily notes of the progress of the case.

A weekly amphitheater clinic is given to third-year students in a body and a similar clinic to the fourth-year class. A series of special neurological clinics is provided for the senior class at the Government Hospital for the Insane, where there is a great wealth of material.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Second Year.			
Physical Diagnosis	64	...	64
Third Year.			
General Medicine	128	128	256
Fourth Year.			
General Medicine	128	192	320
Totals	320	320	640

TROPICAL MEDICINE.

C. S. BUTLER, M.D., Surg. U.S.N., Professor of Tropical Diseases,
Instructor in Bacteriology and Tropical Diseases,
U. S. Navy Medical School

The course in tropical diseases is similar to that given in the Army and Navy Medical Schools, and consists of didactic lectures, quizzes, and laboratory instruction, with particular reference to the parasitic, protozoal diseases common in the tropics and in the southern part of the United States.

Fourth Year.

	Hours.
Tropical Medicine, 1 hour, Feb.-May	16

PSYCHIATRY AND CLINICAL NEUROLOGY.

WILLIAM A. WHITE, M.D., Superintendent of the Government Hospital for the Insane.....Professor of Psychiatry and Clinical Neurology
B. J. LOGIE, M.D.....Instructor in Neurology
GEO. H. SCHWINN, M.D.....Instructor in Psychiatry and Neurology
H. W. MILLER, M.D.....Instructor in Psychiatry and Neurology

A series of lectures and clinics is given upon the subject of insanity in its various forms.

These clinics are given at the Government Hospital for the Insane, which, with its more than two thousand beds, affords one of the largest clinics in this country.

Fourth Year.

	Hours.
Psychiatry and Neurology, 1 hour, Jan.-May. Dr. WHITE	20
Clinical Psychiatry, 1 hour, Jan.-May. Drs. SCHWINN and MILLER.	20

PEDIATRICS.

GEORGE N. ACKER, A.M., M.D.....Professor of Pediatrics
EDGAR P. COPELAND, M.D.....Associate in Pediatrics
H. H. DONNALLY, M.D.....Clinical Associate in Pediatrics.
FRANK LEECH, M.D.....Clinical Associate in Pediatrics
W. J. FRENCH, M.D.....Instructor in Pediatrics

Didactic and clinical lectures, bedside and dispensary clinics are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

The children's clinic, at the Children's Hospital, affords ample material for practical teaching in this branch.

Fourth Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Pediatrics	32	62	94

PHYSICAL DIAGNOSIS.

W. W. Wilkinson, M.D.....Associate in Medicine

A complete course is given in this subject by means of recitations, section work on normal subjects, and with clinical cases which typically represent diseased conditions.

Second Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Physical Diagnosis	32	32	64

SURGERY.

William Cline Borden, M.D.....Professor of Surgery
A. R. Shands, M.D.....Professor of Orthopedic Surgery
Arthur A. Snyder, M.D.....Clinical Professor of Surgery
Francis R. Hagner, M.D.....Professor of Genito-Urinary Surgery
L. A. La Garde, M.D.....Professor of Military Surgery
Charles S. White, M.D.....Associate in Surgery
John R. Wellington, M.D.....Clinical Professor of Surgery
W. F. M. Sowers, A.B., M.D.....Associate in Surgery
L. H. Reichelderfer, M.D.....Clinical Professor of Surgery
I. Lawn Thompson, M.D.....Instructor in Surgery
Charles W. Hyde, M.D.....Instructor in Minor Surgery
A. L. Hunt, M.D.....Instructor in Minor Surgery
E. T. M. Franklin, M.D.....Instructor in Surgery
Cline Chipman, M.D.....Instructor in Minor Surgery
H. H. Kerr, M.D.....Instructor in Surgery

The principles of surgery are presented in a systematic course of lectures, so that the student may obtain a comprehensive and adequate concept of the science and art of surgery. These lectures are followed by recitations held twice a week, so that the subject-matter may be thoroughly impressed upon the students. The special divisions of surgery are taught by associates and instructors who have made specialties of these branches. The clinical material in the University Hospital and Dispensary, being under the control of the Faculty, is directly used throughout the course to illustrate the subjects taught and to familiarize the students with actual clinical conditions.

Surgical technique is taught by instruction in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the patient, and the sterilization of instruments. Practical instruction is given in the Hospital and Dispensary in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Thorough instruction and practical demonstrations are given in the administration of anæsthetics.

Clinical teaching is carried on in the University Hospital and Dispensary, and in other hospitals of the city to which members of the Faculty are attached. Amphitheater clinics are given, in which the general practice of surgical diagnosis and operative technique and therapeutic procedure are shown. Senior students are assigned in rotation to individual cases in the wards of the University Hospital.

Ward clinics and bedside instruction are made a prominent part of the course. The class is divided into sections, which are regularly assigned to clinical work in the University Hospital and Dispensary, and in other hospitals.

Practical work is required of each student in the preparation of dressings, sterilization of instruments, etc.

In the fourth year a thorough course is given in surgical anatomy and operative surgery of the cadaver, in connection with which the instructor takes up a general review of anatomy, so that the student may be thoroughly prepared for State Board examinations after graduation.

Second Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Minor Surgery	64	...	64
Third Year.			
General Surgery	96		
Surgical Pathology	24		
Fourth Year.		256	496
General Surgery	96		
Orthopedics	24		
Genito-Urinary	24		
Gunshot Wounds	8		
Totals	324	256	580

SURGICAL PATHOLOGY.

W. F. M. Sowers, M.D.....Associate in Surgery

Surgical pathology is taught by thorough instruction in the gross and microscopic appearance of surgical diseases and injuries, and by a systematic course of lectures and quizzes by which the etiology, pathology, symptomatology, and treatment of the surgical affections and their relations to each other are shown.

ORTHOPEDICS.

A. R. Shands, M.D.....Professor of Orthopedics

A course of lectures and recitations on the pathology, etiology, course, termination, and treatment of chronic joint diseases, with clinical instruction in the application of special apparatus and of plaster of Paris to the correction of deformities.

GENITO-URINARY DISEASES.

Francis R. Hagner, M.D.....Professor of Genito-Urinary Diseases

A thorough course of instruction in genito-urinary diseases is given by lectures, recitations, section clinics, and bedside teaching.

GUNSHOT WOUNDS.

Louis A. La Garde, M.D.....Professor of Military Surgery

The treatment of gunshot wounds with special reference to civil practice is given in a course of lectures and demonstrations, fully illustrated by lantern slides, X-ray photographs, and actual specimens from the Army Medical School.

OBSTETRICS.

A. F. A. King, A.M., M.D., LL.D.....Professor of Obstetrics
Edward E. Morse, M.D.....Associate in Obstetrics
Julian M. Cabell, M.D.....Associate in Obstetrics
A. Y. P. Garnett, M.D.....Instructor in Obstetrics

The course in Obstetrics comprises a series of lectures on the science and art of midwifery, together with practical work. The chief purpose of the lecturer is to arrange, simplify, and explain the matters studied in the text-books so as to render them more easily intelligible and to indicate their relative importance. The lectures are illustrated by dia-

grams, models, manikins, natural preparations, and instruments. The class is divided into sections, and each student performs various obstetrical operations upon the manikin and receives practical instruction in external pelvimetry and the methods of abdominal palpation and auscultation during pregnancy. Recitations from text-books are held throughout the term. In the fourth year clinical instruction in obstetrics is given, the class being divided into small sections and each section being given bedside instruction and the individual students are required to attend a stated number of cases.

Third Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Obstetrics	128	*	128

Fourth Year.

Obstetrics	32	*	32
Totals	160	...	160

GYNECOLOGY.

J. Wesley Bovée, M.D. Professor of Gynecology
G. Brown Miller, M.D. Associate in Gynecology
A. L. Stavely, M.D. Clinical Professor of Gynecology
W. A. Frankland, M.D. Instructor in Clinical Gynecology
J. Lewis Riggles, M.D. Instructor in Gynecology
Vergil B. Jackson Instructor in Gynecology
Adam Kemble, M.D. Instructor in Gynecology

Gynecology as taught in the third year comprises a course of lectures and text-book recitations. In the fourth year individual students are assigned to cases in the wards of the University Hospital, and the class is taken in sections of one to two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater clinics given by the Professors of Gynecology and Clinical Gynecology.

Third Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Gynecology	32	32	64

* Number of clinic hours cannot be given, but each student is required to attend five cases, exclusive of demonstration work.

Fourth Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Gynecology	32	32	64
Totals	64	64	128

LARYNGOLOGY AND OTOLOGY.

CHARLES W. RICHARDSON, M.D..Professor of Laryngology and Otology
O. A. M. MCKIMMIE, M.D.....Instructor in Laryngology and Otology
H. S. DYE, M.D.....Instructor in Laryngology and Otology
E. G. SEIBERT, M.D.....Instructor in Laryngology and Otology

This course comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

Fourth Year.

	Hours.
Lectures, 3 hours, Oct.-Nov. Professor RICHARDSON	24
Clinics. Professor RICHARDSON, Dr. DYE, Dr. MCKIMMIE, and Dr. SEIBERT	24

OPHTHALMOLOGY.

W. K. BUTLER, M.D.....Professor of Ophthalmology
D. KERFOOT SHUTE, A.B., M.D..Associate Professor of Ophthalmology
E. G. SEIBERT, M.D.....Instructor in Ophthalmology

The course of lectures on this subject is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist, but to give him a knowledge of what every general practitioner ought to know. The course is supplemented by clinical instruction.

Fourth Year.

	Hours.
Lectures, 1 hour, Oct.-Dec. Professor BUTLER	12
Clinics. Professors BUTLER and SHUTE and Dr. SEIBERT	12

DERMATOLOGY.

R. B. CARMICHAEL, M.D.....Professor of Dermatology
C. A. SIMPSON, M.D.....Instructor in Dermatology

The lectures in this course will be principally clinical, supplemented

by didactic lectures, illustrated by diagrams, models, and photographic illustrations of disease from life.

Fourth Year.

	Hours.
Lectures, 1 hour, Oct.-Dec. Professor YARROW	14
Clinics, Oct.-Dec. Professors YARROW and CARMICHAEL	12

HYGIENE.

D. W. PRENTISS, M.D.....Professor of Hygiene

The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative control of public health.

Fourth Year.

	Hours.
Lectures and recitations, 1 hour. Professor PRENTISS	32

MEDICAL JURISPRUDENCE.

W. C. WOODWARD, M.D.....Professor of Medical Jurisprudence

This course is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

Third Year.

	Hours.
Lectures, 1 hour, Feb.-May. Professor WOODWARD	16

CLINICAL FACILITIES.

The following hospitals are open to the students of this school for clinical study, and are extensively used for that purpose:

University Hospital and the University Dispensary, H St., between Thirteenth and Fourteenth Sts., N. W., and adjacent to the Medical Building.—The Hospital and Dispensary are part of the educational equipment of the University. They are integral parts of the Department of Medicine, are entirely controlled by the Faculty of Medicine, and are used primarily in instructing the students in clinical medicine, surgery, and obstetrics. The Dispensary has a large out-patient service in all departments, to which several thousand visits are made annually.

The staff is composed of members of the Faculty of Medicine.

Garfield Memorial Hospital, Florida Ave. and Tenth St., N. W.—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital. There is also an out-patient department, giving good opportunities for experience in the practice of physical diagnosis.

Members of the Faculty on the visiting staff: Professors CLAYTOR and MORGAN, Clinical Medicine; Professors SNYDER, WELLINGTON, and REICHELDERFER, Clinical Surgery; Professor STAVELY, Clinical Gynecology; Professor CARMICHAEL, Clinical Dermatology; Professors SHUTE and BUTLER, Clinical Ophthalmology; Professor HAGNER, Clinical Genito-Urinary Surgery; Professor YARROW, Consulting Physician.

Children's Hospital, W St., between Twelfth and Thirteenth Sts., N. W.—Regular instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department.

Members of the Faculty on the visiting staff: Professors KING and YARROW, Consulting Physicians; Professor WELLINGTON, Clinical Surgery; Professor ACKER and Drs. COPELAND, DONALLY, and LEECH, Clinical Medicine.

Emergency Hospital and Central Dispensary, Fifteenth St. and Ohio Ave., N. W.—This hospital has 36 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in clinical surgery.

Members of the Faculty on the visiting staff: Professor HAGNER, Clinical Genito-Urinary Diseases; Drs. WHITE and JACKSON, Surgery; Professor MORGAN and Dr. ELLIOTT, Clinical Medicine; Professor CARMICHAEL, Clinical Dermatology; Dr. MILLER, Clinical Gynecology; Professor SHANDS, Orthopedics; Professor SHUTE, Ophthalmology; Dr. FRENCH, Pediatrics.

Columbia Hospital for Women, Twenty-fifth St. and Pennsylvania Ave., N. W.—This hospital has 68 charity beds for diseases peculiar to women, and 50 charity maternity beds. Both the obstetrical and the gynecological services are particularly good.

Members of the Faculty on the visiting staff: Professor BOVÈE and Dr. MILLER, Clinical Gynecology; Drs. KELLY, CABELL, and RIGGLES, Clinical Obstetrics; Professor SHUTE, Ophthalmology; Professor RUFFIN, Visiting Physician.

Providence Hospital, Second and D Sts., S. E.—This institution has a large charity service—100 beds for medical and surgical cases and 30 maternity beds.

Members of the Faculty on the visiting staff: Professor RICHARDSON,

Clinical Laryngology and Otology; Professor SHUTE, Clinical Ophthalmology; Dr. SOWERS, Clinical Surgery; Professor CARMICHAEL, Dermatology; Dr. MORSE, Obstetrics.

The Government Hospital for the Insane.—This hospital is maintained by the United States Government. It has 2,500 beds. Clinical instruction in mental diseases is given by the superintendent of the hospital, Professor W. A. WHITE, and Drs. SCHWINN and MILLER. Other members of the Faculty on service at this hospital are Professors FRANZ and BLACKBURN; Professor SHUTE, Consulting Ophthalmologist; Professor RUFFIN, Consulting Physician.

Episcopal Eye, Ear, Throat, and Nose Hospital, Fifteenth St., between L and M Sts., N. W.—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital.

Members of the Faculty on its staff: Professor RICHARDSON, Clinical Otology and Laryngology; Drs. MCKIMMIE and DYE, Clinical Otology and Laryngology; Professor ACKER, Consulting Physician.

Lutheran Dispensary, Fourteenth and N Sts., N. W.—This dispensary affords good opportunities for clinical study of diseases of the eye, ear, throat, and nose.

Members of the Faculty on its staff: Professor BUTLER, Surgeon-in-Charge; Dr. SEIBERT, Ophthalmology; Professor ACKER, Consulting Physician.

Casualty Hospital, 708 Massachusetts Ave., N. E.—Opportunities in emergency and dispensary work are offered by this institution.

Members of the Faculty on its staff: Professor ACKER, Consulting Physician; Dr. BARNES, Clinical Medicine; Dr. MEDFORD, Obstetrics.

Woman's Clinic, 1237 T St., N. W.—Members of the Faculty on its staff: Professor YARROW, Consulting Physician; Professor SNYDER, Attending Surgeon.

Tuberculosis Hospital, 14th and Upshur Sts., N. W.—Members of the Faculty on its staff: Professor CLAYTOR and Dr. RANDOLPH, Clinical Medicine; Dr. REICHELDERFER, Clinical Surgery; Professor RICHARDSON, Ophthalmology.

CLASSIFICATION AND ADVANCEMENT OF STUDENTS.

Students are divided into four classes, according to their proficiency and the time spent, viz: first year, second year, third year, and fourth year.

Proficiency in all subjects is marked on a scale of 100.

Examinations are held at the end of the course in each subject.

In determining the proficiency of a student his laboratory and clinical

work, his quiz record, attendance, and result of examination are all considered.

To be **advanced** a student must obtain a general average of 75 or more in all subjects of the year, and must not fail in more than one major or two minor subjects.

Students who obtain a general average of 75 or more, but who fail in not more than one major or two minors, may be advanced **conditioned** and may be permitted at the next examination period a re-examination in the subjects in which they fail, but all conditions must be removed before a student can be again advanced.

Students who fail of advancement or graduation will not be allowed re-examination and must repeat all subjects in which they obtained less than 85 during the year, and pass an examination on all majors of preceding years in which they obtained less than 85 before they can be advanced or graduated. Students who fail to appear at the regular examinations will not be examined until the next regular examination, except by special permission of the Faculty, and in this event a fee of $5.00 will be charged for each subject. Students who fail to pass satisfactorily their practical laboratory examinations will be required to repeat the laboratory courses and pay the regular laboratory fees. Students will not be admitted to examination unless they have paid all fees due at the time.

A student who has failed of graduation after repeating his final year will not be permitted to maintain his connection with the school.

REQUIREMENTS FOR GRADUATION.

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission and other requirements herein set forth. He must have attended at least 80 per cent of all required instruction during four sessions of eight months each in four separate years, must have satisfactorily completed all his courses and passed all his examinations. He must be present at the time specified for the final examinations, and also at Commencement. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges who desire degrees must spend one year in residence at this school.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated as "having graduated with distinction." If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction."

SCHOLARSHIPS.

Four scholarships are provided for students.

CORCORAN SCHOLARSHIPS.—In recognition of the liberality of the late W. W. Corcoran in endowing the University for the Department of Medicine, the Faculty of Medicine has established in the department four free scholarships.

Two of these scholarships are open for competitive examination to the graduates of the several high schools of the District of Columbia and are awarded to the two students whose averages are highest.

One scholarship is open for competitive examination to graduates of any reputable high school or college who shall give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry, and is awarded to the graduate whose averge is highest.

The remaining scholarship is open for competitive examination to students who, though not graduates of any high school or college, give satisfactory evidence that they are fitted by previous education for the study of medicine, and at the same time give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry, and is awarded to the student whose average is highest.

In establishing these averages professional aptitude and general qualifications are considered along with scholastic ability.

Applications for scholarships should be filed with the Dean not later than May 15. Students holding scholarships pay the matriculation, library, laboratory, and graduation fees, and make the deposit to cover breakage. Holders of scholarships must maintain a satisfactory scholastic average.

PRIZES.

A prize from the Ordronaux Prize Endowment will be awarded under conditions determined by the University authorities.

Professor ACKER gives a prize for the best examination in Pediatrics.

Professor BUTLER gives a prize for the best examination in Ophthalmology.

Professor HAGNER gives a prize for the best examination in Genito-Urinary Diseases.

HOSPITAL APPOINTMENTS.

Interns are annually appointed in the University Hospital. The externs are appointed from the student body. These appointments are made upon competitive examinations under conditons determined by the governing authorities of the Hospital. Appointments to similar posi-

tions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital, Emergency Hospital, Columbia Hospital for Women, Casualty Hospital, Providence Hospital, Washington Asylum Hospital, Children's Hospital, Episcopal Eye, Ear, Throat, and Nose Hospital.

FEES AND CONTINGENT EXPENSES.

1. Matriculation (payable but once)	$5
2. Annual library fee	3
3. Tuition fee per annum, including all charges for materials	150
4. Graduation fee	10
5. Fee for a certificate under the seal of the University	2

A deposit of $10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Dean.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use	$5
Microscope for Bacteriological, Pathological, and Clinical Microscopy Laboratory use	6

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees are due in eight monthly instalments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Treasurer of the University.

WITHDRAWALS.

A certificate of work actually done will be given to any student wishing to withdraw or transfer to some other school during the session. Written notice of such withdrawal or transfer must be filed with the Dean at the time of requesting the certificate, and the student must have paid all fees and dues chargeable against him up to the end of the quarter in which he withdraws.

BOARD AND ROOMS.

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE DEAN,

Department of Medicine,
The George Washington University,
1325 H Street, N. W.,
Washington, D. C.

DEPARTMENT OF DENTISTRY.

FACULTY.

Charles Herbert Stockton, LL.D.....President of the University
John Roland Walton, D.D.S.....Professor of Prosthetic Dentistry and Orthodontia, and Dean, 724 9th Street, N. W.
Henry Clay Thompson, D.D.S.....Professor of Operative Dentistry
Charles Edward Munroe, Ph.D.....Professor of Chemistry
Shepherd Ivory Franz, Ph.D.....Professor of Physiology
William Cabell Moore, A.M., M.D.....Professor of Anatomy
Daniel Kerfoot Shute, M.D.....Professor of Neuro-Anatomy
Huron Willis Lawson, M.D.....Professor of Histology and Embryology
Charles Stanley White, M.D.....Professor of Oral Surgery
Frederick Fuller Russell, M.D.....Professor of Bacteriology and Pathology
Noble Price Barnes, M.D.....Professor of Materia Medica and Therapeutics
John Robert De Farges, D.D.S.....Associate Professor of Dental Metallurgy, Jurisprudence, Economics, and Ethics
Allen Scott Wolfe, D.D.S.....Associate Professor of Crown and Bridge Work
Cadmus Linden Odor, D.D.S.....Associate Professor of Operative Technics
William Francis Lawrence, D.D.S.....Associate Professor of Prosthetic Technics
Arthur B. Crane, D.D.S.....Associate Professor in Oral Surgery
Edward Grant Seibert, M.D.....Associate in Chemistry
Otis Dow Swett, M.S.....Instructor in Chemistry
J. Lewis Riggles, M.D.....Associate in Anatomy
Albert Perkins Tibbets, A.B., M.D.....Instructor in Anatomy
Harry Randall Elliott, M.D.....Associate in Physiology
John Potts Fillebrown, M.D.....Instructor in Physiology
Charles Franklin Craig, M.D.....Associate in Bacteriology and Pathology
Henry James Nichols, M.D.....Associate in Bacteriology and Pathology
Wilbur R. Brandenburg, M.D.....Associate in Bacteriology and Pathology
John Sweyn Neate, M.D.....Associate in Bacteriology and Pathology
Fenton Bradford, D.D.S.....Lecturer in Dental Materia Medica and Therapeutics

JOHN WINSLOW TAYLOR, D.D.S.....Instructor in Prosthetic Technics
HENRY CISSELL YOUNG, D.D.S.....Instructor in Prosthetic Technics
CHARLES GARDNER SHOEMAKER, D.D.S.....Instructor in Operative Technics
HERBERT CORNWELL HOPKINS, D.D.S.....Instructor in Orthodontia Technics
HERMON ARDELL FORDYCE, D.D.S.....Lecturer in Oral Prophylaxis

GENERAL STATEMENT.

The first course of lectures in the Dental School began November, 1887, under the title of "The Columbian University Dental Department." The course then extended over two years of five months each. Two years later the course was extended to seven months; but, this additional time being found inadequate to keep pace with the ever-increasing demand for higher dental education, the course was gradually increased, until now it extends over three years of eight months each.

The academic year begins on the last Wednesday in September and ends on the second Wednesday in June. The next session will begin September 27, 1911. Students should register promptly at the office of the Dean at the beginning of the session, and no student can be received and credited with a full term after ten days from the first lecture. Final examinations are held at the conclusion of the instruction in each subject. The degrees are conferred at Commencement, the first Wednesday in June. For further information communicate with the Dean of the Dental Department or the Secretary of the University.

ADMISSION.

Candidates for matriculation must show that they are fitted by previous education to study dentistry. For this purpose they must present a satisfactory certificate of their attainments from an approved school or college, or they must pass an examination.

Candidates are admitted without examination:

(1) Upon presenting a diploma or certificate of a reputable college conferring on them the degree of A.B. or S. B., or an equivalent degree in the arts and sciences.

(2) Upon presenting a diploma or certificate of graduation from a high school, academy, or preparatory school approved by the University as maintaining an adequate standard.

(3) Upon presenting a certificate of admission to the Freshman class of an approved college.

(4) Upon presenting a certificate of admission to another dental school approved by the University as maintaining an adequate standard.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement of an accredited high school or its equivalent, modified to meet the regulations of State Dental Boards.

The scope of the different subjects is indicated in standard high school text-books.

A candidate may offer certificates of an approved school for work done in any preparatory subjects, and will be credited with the units represented by such work. A candidate failing to pass in two of three subjects of his examination may be admitted to the first year upon the condition that he make up the deficiency before entering the second-year class. The examinations are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

The examinations for admission will be held in June and September, at the Dental Department. An applicant deficient in either Latin or Physics, or both, may be admitted to the first-year class conditioned in those subjects, but such conditions must be made up during the first year.

COURSE OF INSTRUCTION.

The course of instruction extends through three years of eight months each. The subjects taught during the course are divided as follows:

First Year.	Second Year.	Third Year.
Anatomy.	Organic Chemistry.	Operative Dentistry.
Physiology.	Operative Dentistry.	Orthodontia.
General Chemistry.	Prosthetic Dentistry.	Prosthetic Dentistry.
Histology.	Pathology.	Comparative Dental Anatomy.
Operative Technics.	Materia Medica.	Oral Surgery.
Prosthetic Technics.	Operative Technics.	Orthodontia Technics.
Special Anatomy.	Prosthetic Technics.	Metallurgy.
	Infirmary Practice.	Prosthetic Technics.
	Bacteriology.	Infirmary Practice.
	Dental Histology.	Dental Therapeutics.
	Orthodontia Technics.	Dental Pathology.
	Infirmary Practice.	Dental Bacteriology.
	Clinics.	Dental Jurisprudence, Economics and Ethics.
		Infirmary Practice.
		Clinics.

These studies are further described in the following pages.

Hours of recitation, daily from 4.50 p. m. to 10.30 p. m.; 6.30 to 7.30 p. m., dinner hour.

PROSTHETIC DENTISTRY AND ORTHODONTIA.

JOHN ROLAND WALTON, D.D.S.....Professor
HERBERT CORNWELL HOPKINS, D.D.S.,
Instructor in Orthodontia Technics

1. Prosthetic Dentistry. All branches in this department will be under the supervision of the professor. He will deliver the lectures and manage in person and through his assistants the quiz work and course of instruction. This system will prevent confusion in method and technical procedures.

2. Orthodontia. Junior year Orthodontia is a technical course with lectures and demonstrations. The Senior year is a review of the Junior studies with advanced lectures upon the irregularities of the teeth, local and constitutional. Each student is required to make a number of appliances upon models and practically correct cases of irregularity.

OPERATIVE DENTISTRY, DENTAL ANATOMY AND PATHOLOGY.

HENRY C. THOMPSON, D.D.S.....Professor

This course embraces lectures on the special anatomy and physiology of the teeth. The origin, growth, and eruption of the teeth receive minute attention, and are illustrated as their importance demands.

The methods of treating, filling, and extracting teeth receive attention in the lecture-room, and are demonstrated clinically by proficient operators. Extended consideration is given to dental pathology and therapeutics. This chair has personal supervision of the department of Operative Technics.

CHEMISTRY.

CHARLES EDWARD MUNROE, Ph.D.....Professor
EDWARD GRANT SEIBERT, M.D.....Associate
OTIS DOW SWETT, M.S.....Instructor

The instruction in this subject embraces:

A short discussion of the principles of Physics in their relation to Chemistry, the principle of chemical philosophy, and the laws of chemical combination.

A study of the elements, metallic and non-metallic; the preparation, properties, and reaction of their different compounds and their applica-

tion in dentistry; Organic Chemistry, with special attention to those organic compounds that are of practical use; laboratory instruction in the determination of acids and bases, analyses of alloys, etc.

PHYSIOLOGY.

Shepherd Ivory Franz, Ph.D.....Professor
Henry Randall Elliott, M.D.....Associate
John Potts Fillebrown, M.D.....Instructor

This subject is taught in lectures, recitations and laboratory exercises. In the lectures and recitations special emphasis is placed upon those parts of physiology that have a known bearing upon dental medicine and surgery, especially digestion, secretion and the nervous system. Three laboratory periods a week during a semester give the students first-hand knowledge of the principal facts about the general functions of tissues, and the special functions of the nervous system, the special senses, the heart, circulation, digestion, and respiration.

ANATOMY.

William Cabell Moore, A.M., M.D.....Professor
Daniel Kerfoot Shute, M.D.....Professor
J. Lewis Riggles, M.D.....Associate
Albert Perkins Tibbets, A.B., M.D.....Instructor

The instruction in Anatomy is given in a graded course of lectures, recitations from prescribed text-books, and especially by practical work in the dissection of the cadaver. The lectures are illustrated by the use of dry and wet dissections of the cadaver, by models, diagrams, charts, and sciopticon views.

Practical work in osteology and in dissection of the head are of fundamental importance. For the study of these subjects the class is divided into sections in order to make the instruction as practical as possible. The bones of the skeleton are placed in each student's hands, and he is instructed and quizzed upon all their important features.

MATERIA MEDICA AND THERAPEUTICS.

Noble Price Barnes, M.D.....Professor
Fenton Bradford, D.D.S.,
Lecturer on Dental Materia Medica and Therapeutics

Instruction in these subjects embraces:

The study of crude drugs and their preparations and the art of prescribing; the physiological action of drugs in the human system; the practical application of drugs and other therapeutical agencies to the

prevention and cure of diseases and the relief of suffering, together with their antidotal relation to poisons.

The subject is taught by means of lectures, recitations, and blackboard illustrations, and is made practical to as great a degree as is compatible with a sufficiently thorough understanding of its principles.

In connection with this chair is a pharmaceutical laboratory, well equipped with modern appliances, in which are taught the making of typical preparations of the Pharmacopœia, prescription writing, and the compounding of prescriptions.

Special attention is given to those drugs that are of most value in the practice of dentistry.

ORAL SURGERY.

CHAS. STANLEY WHITE, M.D.....Professor
ARTHUR B. CRANE, D.D.S.....Associate Professor

Instruction in this subject will consist of didactic lectures, recitations, case histories, together with clinics at regular intervals.

The lectures will deal with surgical bacteriology and pathology, surgical technique, anesthesia, wounds, hemorrhage, shock, new growths, constitutional diseases, plastic operations upon the palate and face, dislocation and fracture of the maxillæ. Charts, diagrams, photographs and stereopticon slides will supplement the lectures.

In the clinics at the Emergency Hospital, illustrative cases will be shown. The students will be expected to attend such operations which pertain to this subject.

HISTOLOGY.

HURON WILLIS LAWSON, M.D.....Professor

The course in Histology consists in a systematic presentation of the subject of the minute anatomy of the various parts of the body, especial attention being devoted to the histology of the teeth and neighboring structures. The subject is presented partly by systematic lectures, and more especially by the practical study by the individual students of actual specimens under the microscope. The methods of preparation of microscopical specimens are presented and practiced in the laboratory. The projection microscope, affording valuable aid in illustrating and presenting the subject, is constantly used.

PATHOLOGY AND BACTERIOLOGY.

FREDERICK FULLER RUSSELL, M.D.....Professor
CHARLES FRANKLIN CRAIG, M.D.....Associate Professor
HENRY JAMES NICHOLS, M.D.....Associate
WILBUR R. BRANDENBURG, M.D.....Associate
JOHN SWEYN NEATE, M.D.....Associate

The course begins with a consideration of the principles involved in the process of sterilization by dry and moist heat, the relative value and mode of application of each, and an explanation of the construction of the apparatus employed for the purpose. The use and construction of the thermostat is taken up at the same time and the student taught how he can dispense with these costly appliances in emergencies.

The composition and modes of preparation of the various nutritive media are next considered, working formulas given, and the student required to prepare them at least once in the laboratory. This is followed by a discussion of bacteria as a class, their position in the biological world, their classification, distribution, and the general and special characters that belong to them.

After this preparatory training the various methods in use for the isolation and study of bacteria are taught by practical demonstration and practiced by the students, after which the most important pyrogenic organisms are studied in detail, giving special attention to those found in the nasal and oral cavities.

The aim of the course is chiefly to afford the students an opportunity to become practically familiar with bacteriological working methods, and to enable them to isolate and identify the bacteria present in suppurative processes, as well as to comprehend intelligently the references to micro-organisms in the current professional literature of the day.

PROSTHETIC TECHNICS.

WILLIAM FRANCIS LAWRENCE, D.D.S...Associate Professor Senior Year
JOHN WINSLOW TAYLOR, D.D.S.....Instructor Junior Year
HENRY CISSEL YOUNG, D.D.S.....Instructor Freshman Year

The technic laboratories are thoroughly equipped for their particular work. The course in prosthetic technics extends through the Freshman, Junior, and Senior years.

The first year is a technical and didactic course. The students are taught the proper equipment of a dental laboratory; the preparation of the mouth for dentures; methods of taking impressions of the mouth and manipulation of the various impression materials; the preparation and mounting of models; selection and artistic arrangement of teeth; the construction of plastic dentures and crowns with general details.

In the Junior class the course is a review of the Freshman year with extended technical and didactic work, embracing a practical course in the swaging of the various metals, as taking impressions, making models and dies, swaging, rimming, attaching teeth by rubber, and in general construction of metal dentures, crown and bridge work.

The Senior year is a practical course, embracing the swaging of plates, teeth attached by soldering, clasps, porcelain work, advanced bridge-

work, removable bridges, and the detailed construction of all work in prosthetic dentistry.

The work of the Department is under the immediate supervision of the associate professor.

OPERATIVE TECHNICS.

CADMUS LINDER ODOR, D.D.S.....Associate Professor
CHARLES GARDNER SHOEMAKER, D.D.S.....Instructor

This subject is taught by lectures, illustrated by enlarged models and drawings, together with demonstrations of instruments and materials. The students perform exercises in manipulative procedure under the direction of the instructors.

The subjects embraced in the course consist, first, of the study of dental nomenclature, that the student may acquire an understanding of the technical terms used in the course of his dental studies. This is followed by descriptive dental anatomy and the forms and surface markings of each tooth studied, the natural teeth, as well as enlarged models and drawings being used for the purpose. Each student is required to make various sections of the teeth for the thorough study of the pulp chambers and root canals and their relations to the external surfaces of the teeth.

That tooth-forms may be more perfectly impressed upon the mind of the students, each one is required to carve a tooth of the several classes, as incisor, cuspid, bicuspid, and molar, in bone or artificial ivory, representing the actual form and size of the natural organ. Cavities are classified and illustrated by drawings and models, followed by their preparation and filling in technic forms by the student. Treating and filling root canals is given full attention, the students performing operations of this kind upon natural teeth mounted for the purpose.

All work, in its relation to operative dentistry, is given the necessary consideration to fit the student for meeting, as far as possible, the actual requirements of the infirmary. The operations in the technic department require a large number of natural teeth and a sufficient supply is difficult to obtain.

COMPARATIVE DENTAL ANATOMY.

The senior students will study in this course the food habits and the teeth of animals. The forms of teeth and their uses as weapons of offense and defense will be studied.

CROWN AND BRIDGE WORK, GOLD INLAY, AND PORCELAIN.

ALLEN SCOTT WOLFE, D.D.S.....Associate Professor

METALLURGY.

JOHN ROBERT DE FARGES, D.D.S.....Associate Professor

The subject of Metallurgy taught in the chemical laboratory will be reviewed and an extended course will be given in metals, alloys, and amalgams which are used in dentistry.

PROFESSIONAL ETHICS, DENTAL JURISPRUDENCE AND ECONOMICS.

These lectures on ethics consist of a brief statement of the moral obligations of professional men to each other and to their patients and upholding the honor and dignity of the profession, the differences between the profession, business and manufacturing pursuits.

The lectures on jurisprudence will follow the text-book by Dr. Rehfuss, which fully elucidates the legal relation of the dentist to his patients, the importance of dental records, the limitations of dental practice, the liabilities incurred by those who administer anesthetics, the penalties, etc.

Economics.—This course will instruct the student in the proper methods to insure a practice and to retain patients; will discuss business relations between patients and dentists, fees, book and card systems, and the general economy in conducting an office.

Instruction in this course is systematically given by lectures and clinics. The course in technique extends through the Freshman, Junior, and Senior years.

Students are taught the principles and practice of inlay work, porcelain crowns, high and low fusing bodies, the use of the electric and gas furnaces.

ORAL PROPHYLAXIS.

HERMON ARDELL FORDYCE, D.D.S.....Lecturer

This subject will be taught didactically, and clinically practical work by the students in the treatment of the oral cavity will be required.

THE DENTAL INFIRMARY.

CHARLES TURK BASSETT, D.D.S.....Associate Professor in Charge
MARION EDWYN HARRISON, D.D.S.....Demonstrator
JOHN WINSLOW TAYLOR, D.D.S.....Demonstrator
HENRY CISSEL YOUNG, D.D.S.....Demonstrator
MELVILLE PALMER ESLIN, D.D.S.....Demonstrator
JAMES NORRIS ROBINSON, D.D.S.....Demonstrator

The Infirmary is open every week-day the entire year. An abundance of clinical material is readily available. In fact, as many patients present themselves as can possibly be attended to by the students. It is under the immediate supervision of the Demonstrator in charge, who is present from 1 until 5 o'clock.

CLINICAL STAFF.

CAESARE LOUIS CONSTANTINI, D.D.S.....Clinician in Charge
ARTHUR DURDAN WEAKLEY, D.D.S.....Clinical Instructor in Dentistry
THOMAS LOCKE RUST, D.D.S.....Clinical Instructor in Dentistry
GEORGE BERTRAM ROPER MACDONALD, D.D.S.....Clinical Instructor in Dentistry
WILLIAM CARL KILLINGER, D.D.S....Clinical Instructor in Orthodontia
MARK FLORUS FINLEY, D.D.S.....Clinical Instructor in Orthodontia
ALEXANDER DUNNINGTON COBEY, D.D.S.....Clinical Instructor in Non-Cohesive Gold
GEORGE MILLER SHARP, D.D.S.....Clinical Instructor in Special Crown Work
ZENAX WILBUR ALDERMAN, D.D.S.....Clinical Instructor in Electro-Therapeutics
ROBERT EDWIN LAYTON, D.D.S.....Clinical Instructor in Dentistry

TEXT-BOOKS AND WORKS OF REFERENCE.

(The works first named and in *italics* are preferred.)

Anatomy.—*Cunningham's Text-book of Anatomy; Cunningham's Manual of Practical Anatomy;* Dental Anatomy, Black's.

Physiology.—Raymond's Human Physiology; Howell's Text-book of Physiology; Tigerstedt's Text-book of Physiology.

Pathology and Bacteriology.—Delafield and Prudden's Pathology; Jordan's Bacteriology.

Chemistry.—*Simon's Chemistry.*

Materia Medica.—*H. C. Wood's Therapeutics;* Hare's Practical Therapeutics; A. A. Stevens' Modern Materia Medica and Therapeutics; Culbreath's Materia Medica and Pharmacy; National Dispensatory Reference Text-books, Osborne, Wilcox, Sollmann, Shoemaker, U. S. Pharmacopœia and National Formulary; Dental Materia Medica and Therapeutics (Prinz); Modern Dental Materia Medica, Therapeutics, and Pharmacology (Buckley); Medical Dictionary (Dorland).

Prosthetic Dentistry.—*The American Text-book of Prosthetic Dentistry;* Essig's Dental Metallurgy.

Operative Dentistry.—*Harris' Principles of Practice;* Tome's Dental Anatomy and Surgery; Taft's Operative Dentistry; American System of Dentistry (Litch); Kirk's Operative Dentistry; Johnson's Operative Dentistry.

Oral Surgery.—Marshall's Oral Surgery; Grant's Oral Surgery.

Histology.—Nichols, Böhm and Davidoff; Anatomy and Histology of the Mouth, by Bromell.

Orthodontia.—Angle, Treatment of Malocclusion of the Teeth and Fractures of the Maxillæ; Talbot, Irregularities of the Teeth; Jackson, Orthodontia.

Dental Jurisprudence.—Rehfuss.

Dental Pathology and Therapeutics.—Burchard.

Comparative Dental Anatomy.—Thompson.

GRADUATION.

Candidates for graduation must have attended three full courses of lectures, each of eight months' duration, and three courses of clinical instruction in this Department, during the regular winter term and in separate years. Students are examined at the end of the regular course upon all subjects taught them during that course. Should the student fail in his examination in course, he may be reëxamined in the fall. All fees must be paid and Infirmary requirements complied with before the student may present himself for examination.

Students must enter before, or within ten days after, the opening lecture of the regular course. They may register at any time during the Infirmary course, and thus begin Infirmary practice at once upon payment of twenty-five dollars, which amount will be deducted from their tuition fees for the succeeding regular term.

The candidate for graduation must be examined upon all subjects taught in this Department, and before the examination he must perform operations upon the natural organs in the Infirmary, and present the Museum a well-constructed specimen of dental mechanism made by himself in the dental laboratory of the University.

In addition to the above requirements, the moral character and habits of the candidate, his industry, and diligent attendance will be taken into consideration. Notable negligence, immorality, or habitual absence from the lectures will preclude the candidate from attaining his degree, even though he may have acquired sufficient technical knowledge to pass a creditable examination. This reservation on the part of the Faculty of the right to make good moral character a prerequisite for graduation must not be overlooked.

The student also, during and between the sessions, must comply with

the State laws regulating the practice of Dentistry, and act in accordance with the recognized code of ethics of the dental profession.

The degrees are conferred by The George Washington University, incorporated by Act of Congress of the United States.

PRIZE AWARDS 1910-11.

The First Prize for the best record throughout the course of three years was awarded to Eugene Roger Stone, whose average was 92.2 per cent. Honorable mention was made of John McGirk McCausland, whose average was 88.8 per cent.

The J. Roland Walton Prize for the best Prosthetician was awarded to Eugene Roger Stone. Honorable mention was made of John McGirk McCausland.

The Henry C. Thompson Prize for the best Operator in the Dental Infirmary was awarded to Eugene Roger Stone. Honorable mention was made of Lloyd Y. Beera and John McGirk McCausland.

COURSES IN ARTS AND SCIENCES.

Students taking a full course for a degree may be admitted without additional fee, except laboratory fees, to courses for which they are qualified, in the Department of Arts and Sciences, the aggregate of such courses not to exceed six hours per week.

LOCATION.

The Dental Building is No. 1325 H Street, N. W. It is within half a square of all lines of street cars going to every part of the city.

The Dean may be seen personally at 724 9th street N. W., on any week day, and also at the Dental Building, 1325 H street, N. W., on Tuesday and Thursday of each week at 4.30 p. m. during the session.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable once)	$5
2. Annual library fee	2
3. Tuition fee per annum, including all charges for materials	125
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms	2
5. Fee for graduation	10
6. Tuition fee per annum for any year repeated once	75
In addition to the tuition fees for special or repeated laboratory courses, a charge will be made for materials used.	
7. Fee for a certificate under the seal of the University	2

8. Auditors are admitted to lecture courses for the regular tuition fees, but are not permitted to take active part in the work of the classes and will not be allowed credit, in a subsequent course of studies leading to a degree, for attendance as auditors. No matriculation or library fee is charged.
9. A deposit of $10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form and from the end of the current month when such withdrawals shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form, to be obtained from the Dean, and will only be received at the end of a quarter session.

Students are furnished microscopes at the following rates:

Microscope for histological laboratory use	$5
Microscope for bacteriological, pathological, and clinical microscopy laboratory use	6
Cost of text-books, about	30
Cost of instruments, first year	20

PAYMENT OF FEES.

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees are due in eight monthly instalments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Treasurer of the University.

BOARD AND ROOMS.

A register of boarding-houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks and further information, address

J. Roland Walton, D.D.S., *Dean,*
724 9th Street, N. W.

PART III.

ASSOCIATED COLLEGES.

National College of Pharmacy.

College of Veterinary Medicine.

Institutions in the District of Columbia organized as corporations under the Charter of the University, having separate financial foundations but educationally forming a part of the system of the University.

TRUSTEES OF THE NATIONAL COLLEGE OF PHARMACY.

President of the University, *ex-officio* Member of the Board.

1911.

C. B. Campbell, M.D., Phar.D.
Herbert C. Easterday, Phar.D.
Lewis Flemer, Phar.D.
Willard S. Richardson, Phar.D.

1912.

Frank C. Henry, Phar.D.
Augustus C. Taylor, Phar.D.
H. E. Kalusowski, M.D., Phar.D.
Samuel L. Hilton, Phar.D.

1913.

Wymond H. Bradbury, Phar.D.
Samuel Waggaman, M.D.
James K. Eppley, Phar.D.
Frank P. Weller, Phar.D.

Officers of the Board.

H. E. Kalusowski, Chairman.
Frank C. Henry, Vice-Chairman.
W. H. Bradbury, Secretary.
Herbert C. Easterday, Treasurer.

FACULTY OF THE NATIONAL COLLEGE OF PHARMACY.

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY
HENRY E. KALUSOWSKI, M.D., Phar.D....Professor of Pharmacy, Dean
SAMUEL WAGGAMAN, M.D., Phar.D.....Professor of Materia Medica, Botany and Toxicology
GEORGE A. MENGE, Ph.D.....Professor of Chemistry and Physics
HOWARD M. BRADBURY, Phar.D.....Professor of Analytical Chemistry
BURTON J. HOWARD, B.S.....Professor of Microscopy
HENRY B. FLOYD, Phar.D.....Professor of Mercantile Pharmacy
ALEXANDER MUNCASTER, Phar.D., LL.B., LL.M.....Professor of Pharmaceutical Jurisprudence
DOUGLAS TSCHIFFLEY, Phar.D...Assistant to the Professor of Pharmacy
LORING W. BEESON, Phar.D., Assistant to the Professor of General Chemistry
HOMER K. BUTLER, Phar.D., Assistant to the Professor of Analytical Chemistry

GENERAL STATEMENT.

The National College of Pharmacy, which is the outgrowth of the Columbian Pharmaceutical Association, organized in April, 1871, was chartered under the provisions of an act of Congress in 1872, and opened its doors to students November 11 of that year. In February, 1906, it became a member of the educational system of The George Washington University, under the charter of the University granted by Congress March 3, 1905, providing for the organization of colleges. The President of the University is *ex-officio* president of the National College of Pharmacy, and the College is represented in the President's Council by its Dean.

The work of the College embraces courses in chemistry, botany, materia medica and toxicology, pharmacy and pharmaceutical laboratory work, analytical chemistry, microscopy, mercantile pharmacy, and pharmaceutical jurisprudence. Three years are required for the completion of the prescribed course.

The new College building is centrally located on I street, northwest, between Eighth and Ninth streets. It is easily reached by either of the four principal street car lines of the city.

PRELIMINARY EDUCATION AND EXAMINATION.

The College requires of its Matriculants a knowledge of the branches usualy taught in the public schools of Washington, D. C., to the extent of *one year in the high school or its equivalent,* and they shall be at

least seventeen years of age. Evidence of this may be shown by certificates from reputable teachers or by the results of an examination to be held at the College, at one o'clock p. m., THURSDAY, September 14, 1911.

Beginning with the session of 1912-13, candidates for admission to the college will be required to have two years high school instruction or its equivalent. Beginning with the session of 1914-15, candidates will be required to have three years high school instruction or its equivalent. Beginning with the session of 1916-17, candidates will be required to have your years high school instruction or its equivalent.

SPECIAL COURSES.

Students may select one or more of the branches taught and attend the lectures and laboratory work during the time set apart for such study.

Students taking single tickets are not entitled to take the examinations for the degree conferred by the College.

THE DEGREE.

The degree conferred is *Doctor of Pharmacy.*

QUALIFICATIONS FOR THE DEGREE.

1. The student shall have attended three courses of instruction in Chemistry, Pharmacy, Analytical Chemistry, Materia Medica, Botany, and Toxicology; and two in Microscopy, the last of which must have been in this College; and one course each in Mercantile Pharmacy and Pharmaceutical Jurisprudence.

2. He must have passed a satisfactory examination in each of the branches taught.

3. He must be recommended by the Board of Examiners.

MATERIA MEDICA, BOTANY AND TOXICOLOGY.

FRESHMAN COURSE.

The first lectures are introductory to the study of elementary botany, after which follow vegetable histology and plant physiology. The subject-matter of these lectures is thoroughly explained by means of charts, diagrams, and specimens.

JUNIOR COURSE.

This course is devoted to the consideration of the various theories concerning the vegetable world and the practical results obtained by experienced laborers in this science. The lectures are illustrated by means of the lantern and microscope. A large part of the course is devoted to a consideration of the official organic drugs.

Senior Course.

The lectures are mainly upon the active principles, adulterants, official preparations, therapeutic uses, and doses; after which the organic and inorganic poisons are taken up under three heads: 1st, Corrosive; 2d, Irritant; and 3d, Neurotic Poisons. Under these three divisions are explained briefly their action, detection, and antidote.

PHARMACY.

Freshman Course.

This course is given to the study of the various pharmaceutical processes and operations. Following in the order named are lectures on metrology, heat, thermometry, evaporation, distillation, fusion, sublimation, calcination, granulation, comminution, solution, filtration, clarification, decoloration, precipitation, crystallization, and extraction, during which the various methods used to bring about the desired results will be illustrated.

Junior Course.

During a part of this course the time is given to the application of the processes considered during the Freshman year to pharmacopœial preparations, and such modifications as adapt them to special uses. This includes methods for making solutions of various substances, extracts, pills, tablets, triturates, compressed tablets, capsules, powders, suppositories, plasters, ointment, cerates, and oleates.

The latter part of this course is taken up with the study of official preparations obtained from the elementary bodies beginning with bromine, chlorine, iodine, phosphorus, and sulphur, following by carbon, boron, silicon, the inorganic acids, potassium, sodium, lithium, ammonium, magnesium, calcium, barium, zinc, aluminum, cerium, cadmium, manganese, iron, chromium, lead, silver, copper, mercury, antimony, arsenic, bismuth, and gold.

Senior Course.

The time during this course is mainly given to the study of compounds chiefly derived from organic matter, and products obtained therefrom, amylaceous and saccharine substances; glucosides and alkaloids, volatile oils and animal products commonly used in pharmacy, vegetable oils, soaps, resinoids and products from resins.

ANALYTICAL CHEMISTRY.

The instruction in this Department is intended to present the chemical tests of the United States Pharmacopœia, with methods for the identification of substances and for the detection of impurities; to instruct

in the methods of assaying and the use of volumetric solutions, and to enable students to analyze any ordinary mixture of inorganic material.

For the purpose of carrying out the work of this Department a large, well-equipped laboratory is provided with all the usual water and gas facilities, and has recently been wired and installed with electric apparatus whereby electro-chemical methods of analysis can be taught and the application of the electric current to the preparation of chemicals by the methods of electro-chemistry can be illustrated before the students. These and other facilities afford students exceptional opportunities to become familiar with the fundamental principles of the science of chemistry.

The first year is devoted to experimental work so arranged as to supplement the lectures in General Chemistry.

The second year covers a systematic course in qualitative analysis in connection with the tests of the United States Pharmacopœia.

The third year is devoted to volumetric analysis by means of the standard solutions of the Pharmacopœia.

GENERAL CHEMISTRY AND PHYSICS.

Inasmuch as the subjects of Analytical Chemistry and Pharmacy are fully provided for in other courses, these lectures are devoted more closely to the fundamental principles and classification which must underlie a thorough and systematic knowledge of Chemistry. Owing to the intimate connection existing between Chemistry and several branches of Physics, a number of lectures illustrating the more important laws and principles of some of these branches precedes the regular course in Chemistry, and others on these subjects with which a prior acquaintance is less important follow after the student has acquired some knowledge of chemical changes. During the first half of the second year Physics and the non-metallic elements receive consideration, followed during the remainder of the second and a portion of the third year by the metals. The greater portion of the third year is devoted to the exposition of the more important facts, principles, and theories of Organic Chemistry.

MICROSCOPY.

The course of Microscopy gives instruction in the use of the compound microscope as an aid in the study and identification of drugs, and requires full attendance from Junior and Senior students.

The work includes both lectures and laboratory courses, and consists in the examination of plant tissue as illustrated in various vegetable substances most familiar to pharmacists. Special attention is given to the structural characteristics by which one drug can be distin-

guished from another as well as to the detection and identification of the most common adulterants used.

MERCANTILE PHARMACY AND PHARMACEUTICAL JURISPRUDENCE.

These courses are required in the Senior class only.

FEES.

Matriculation	$5
Tickets for the full year's course of instruction, Freshman	80
Tickets for the full year's course of instruction, Junior	85
Tickets for the full year's course of instruction, Senior	90
Single tickets for Chemistry, Materia Medica, Botany and Toxicology, each	20
Single tickets for Analytical Chemistry	25
Single tickets for Practical Pharmacy	25
Single tickets for Microscopy	20
Single tickets for Mercantile Pharmacy	10
Single tickets for Pharmaceutical Jurisprudence	10
Fee for Diploma	10

COLLEGE CALENDAR.

The thirty-eighth annual session of the College will begin on Wednesday, September 20, 1911, and close on Wednesday, June 5, 1912.

Monday.	Tuesday.	Wednesday.
FRESHMEN. Botany. Lectures and Recitations, 10 to 11 a. m. Pharmacy. Lectures and Recitations, 11 a. m. to 12 m. Recess, 12 m. to 12.30 p. m. Pharmacy. Laboratory Work, 12.30 to 4 p. m. JUNIORS. Physics and General Chemistry. Lectures and Recitations, 6 to 7 p. m. Analytical Chemistry. Lectures, Recitations, and Laboratory Work, 7 to 11 p. m.	SENIORS. Microscopy. Lectures and Practice, 6 to 8 p. m. Mercantile Pharmacy. Oct. 6 to Jan. 26. Lectures and Practice, 8 to 10 p. m. Pharmaceutical Jurisprudence. Feb'y 2 to end of Term. 8 to 9 p. m.	JUNIORS. Botany and Materia Medica. Lectures and Recitations, 10 to 11 a. m. Pharmacy. Lectures and Recitations, 11 a. m. to 12 m. Recess, 12 m. to 12.30 p. m. Pharmacy. Laboratory Work, 12.30 to 4 p. m. FRESHMEN. Physics and General Chemistry. Lectures and Recitations, 6 to 7 p. m. Analytical Chemistry. Lectures, Recitations, and Laboratory Work, 7 to 11 p. m.

Thursday.	Friday.	Saturday.
SENIORS. General and Organic Chemistry. Lectures and Recitations, 6 to 7 p. m. Quantitative Chemical Analysis. Lectures, Laboratory Work, and Recitations, 7 to 11 p. m.	Materia Medica and Toxicology. Lectures and Recitations, 10 to 11 a. m. Pharmacy, Lectures and Recitations, 11 a. m. to 12 m. Recess, 12 m. to 12.30 p. m. Pharmacy. Laboratory Work, 12.30 to 4 p. m. JUNIORS. Microscopy. Lectures, Laboratory Work, and Recitations, 6 to 8 p. m.	

Entrance examination at 1 p. m. on Thursday, September 14, 1911, in the Lecture room of the College.

Annual examination of Freshmen and Juniors for promotion and of Seniors for graduation begins on Friday, April 27, 1912.

1911—November 24, legal holiday; no College exercises. December 21, last lecture before Christmas vacation.

1912—January 3, lectures resume. February 22, convocation day. June 7, graduation day; College closes.

For further information consult the Dean, Henry E. Kalusowski, 808 I St. N. W.

COLLEGE OF VETERINARY MEDICINE.

BOARD OF TRUSTEES.

J. A. T. Hull.
H. Rozier Dulany.
William Corcoran Eustis.
David E. Buckingham, V.M.D.
John Lockwood, V.S.
John P. Turner, V.M.D.

FACULTY.

Charles Herbert Stockton, LL.D.....President of the University
David Eastburn Buckingham, V.M.D.....Dean, Professor of Materia Medica, Therapeutics, and Canine Practice
Charles Edward Munroe, Ph.D.....Professor of Chemistry
Shepherd Ivory Franz, Ph.D.....Professor of Physiology
John Lockwood, D.V.S.....Professor of Veterinary Surgery
John Pollard Turner, V.M.D....Professor of Theory and Practice of Veterinary Medicine
Robert J. Formad, V.M.D., M.D..Professor of Comparative Histology and Pathology
Adolph Eichhorn, D.V.S.....Professor of Contagious Diseases and Sanitary Science
Frederick Fuller Russell, M.D., Major U. S. Army, Director Army Medical School, Professor of Bacteriology and Pathology
Thomas Malcolm Price, M.S., Ph.D.....Professor of Physiological Chemistry
Benjamin T. Woodward, V.M.D...Assistant Professor of Zoötechnics, Milk Hygiene, and Dairy Inspection
John M. Buck.....Assistant Professor of Veterinary Anatomy
Hulbert Young, V.M.D...Assistant Professor of Veterinary Obstetrics and Lecturer on Horseshoeing
William W. Bride, A. B., LL.B..Lecturer on Veterinary Jurisprudence
Herbert S. Williams, V.M.D.....Chemical Instructor in Military Veterinary Science
Jacob Traum, D.V.M.....Instructor in Histology and Embryology
John Sweyn Neate.....Instructor in Bacteriology and Pathology
—— ——.....Instructor in Veterinary Anatomy
William P. Collins, D.V.S...Instructor in Clinical Veterinary Surgery
Louis B. Castell, Phar.D.....Lecturer on Botany and Demonstrator in Veterinary Materia Medica and Pharmacy
E. H. Ingersoll.....Assistant in Physiological Chemistry
Harry W. Graybill, M. S., B.A.....Lecturer on Veterinary Zoölogy and Parasitology

RALPH J. CARR, B.S.....Lecturer on Feeds and Feeding
EDWARD H. RILEY, B.Agr.....Lecturer on Judging Breeds and Breeding
REID R. ASHWORTH, D.V.S.....Lecturer on Veterinary Dentistry

REQUIREMENTS FOR ADMISSION.

Students presenting a diploma from any recognized college, normal or high school are eligible to admission without examination.

Students not having the above qualifications will be required to pass an examination in the common-school branches ordinarily required by the U. S. Civil Service, second-grade examination supplemented by history and geography of United States and its possessions.

ADMISSION OF STUDENTS FROM OTHER SCHOOLS.

Students of other recognized and approved veterinary schools may be admitted to this school as follows:

Those qualified to enter the second year of such a school may be admitted to the second-year class of this school; those qualified to enter the third year of their own school to the third year of this school. Provided, however, that the subjects pursued by the applicants in their previous year or years are reasonably equivalent to those required in the same year or years in this school, and that the requirements for advancement from class to class are the equivalent of those in this school. Applicants may be required to submit to examination in all the subjects pursued by the previous class of this school.

EVIDENCE OF ATTENDANCE.

At the end of the college year each student is entitled to and shall receive a written statement giving the length of time spent in each study during the session and the grade received therein. This statement, or definite evidence of credit, shall be exacted from a student before he is given advanced standing in any veterinary college. (U. S. B. A. I. Cir. 150.)

ADVANCED STANDING.

Advanced standing will be given for degrees in Medicine, Dentistry, Veterinary Medicine, or Pharmacy.

Students holding degrees in Arts, Science, Philosophy, or Agriculture, who in the course of study for their degrees have pursued studies in chemistry, physiology, anatomy, histology, bacteriology, or pathology, equivalent to the courses in these subjects in this college, may upon satisfactory evidence of their proficiency be credited with such studies. Provided, however, that such students shall devote two years' study in veterinary medicine, the last year of which is passed in this College.

SPECIAL STUDENTS.

Students, approved by the Dean, not candidates for the degree of Doctor of Veterinary Medicine, may be admitted without examination to pursue any course they may elect. Such courses cannot, however, be subsequently considered as time spent in the course for the degree of Doctor of Veterinary Medicine. Nor can such students enter upon the regular veterinary course without complying with all the regular requirements for admission.

CLASSIFICATION OF STUDENTS.

Students are divided into three classes, according to their proficiency and the time spent, viz., first year, second year, and third year. Students cannot advance to a higher class with more than one major and one minor condition. Students failing in any subject or subjects may be permitted at the next examination period a reëxamination in the subjects in which they fail. The Faculty may dismiss any student from the College, if in its judgment such student be deemed an unsuitable person, intellectually or otherwise, for the profession of veterinary medicine.

ORDER OF INSTRUCTION.

The subjects studied in each year are shown in the following table:

First Year.	Second Year.	Third Year.
Anatomy.	Bacteriology.	Practice.
Histology.	Pathology.	Surgery.
General Chemistry.	Physiology.	Obstetrics.
Materia Medica.	Canine Med.	Therapeutics.
Horseshoeing.	Surgery.	Meat Hygiene.
Botany.	Practice.	Veterinary Jurisprudence.
	Clinics.	Clinics.
	Zoötechnics.	Parasitology.
	Bio-Chemistry.	Milk Hygiene.
	Pharmacy.	Zoötechnics.
	Regional Anatomy.	Zoölogy.
		Control of Infectious Diseases.

For lecture, laboratory and dissecting hours a schedule card is furnished.

Examinations are held at the end of each course. Clinical work in the veterinary and canine hospitals connected with the College and at abattoirs and stock and dairy farms is required of second and third year students.

ANATOMY.

JOHN M. BUCK, D.V.M.....Professor of Veterinary Anatomy
JOHN M. BUCK, D.V.M.....Instructor in Anatomy

The instruction in Anatomy is given in a series of lectures, demonstrations, recitations, and laboratory work, the latter being the most important.

The lectures are intended to present the general anatomical features of the horse and other domestic animals, and to point out the anatomical relations of the organs and parts of the body most subject to surgical operations.

The horse is used as the type subject in dissection, and every student is required to dissect all the parts of the horse, and such other of the domesticated animals, including the ox, sheep, swine, dog, and cat, as may prove most expedient.

The laboratory is well supplied with all of the parts of the skeleton of the horse, and portions of the skeleton of various other domestic animals, for the work in osteology. Ample material is always available for the dissection of joints, muscles, viscera, and the vascular and nervous systems. The laboratory is also provided with a complete model of the horse, showing the relation of all the organs and parts of the body, for demonstrations in general and surgical anatomy. The course is completed in the first year.

TEXT-BOOK: Sisson, Veterinary Anatomy.

HISTOLOGY AND EMBRYOLOGY.

ROBERT J. FORMAD, V.M.D., M.D...Professor of Comparative Histology and Embryology
JACOB TRAUM, D.V.M.....Demonstrator in Histology and Embryology

These subjects are taught by a series of carefully correlated lectures, recitations, quizzes, and demonstrations, and will include such instruction in microscopy as a working knowledge of the use of the simple and compound microscope and accessories, supplemented by the fundamental laws of optics; the method of preparing tissues for microscopic examination, and the technique of mounting.

Comparative histology will deal with the minute structure of the tissues and organs of various animals, including man. In addition to the microscopical demonstrations, lantern demonstrations will also be given.

Embryology under this head will present the salient features of the anatomy and physiology of the fecundated ovule up to the time of birth.

TEXT-BOOK: Histology, Böhm, Davidoff & Huber.

PHYSIOLOGY.

SHEPHERD IVORY FRANZ.....Professor of Physiology

The course in Physiology consists of lectures, demonstrations, and laboratory exercises. The lectures cover all the important facts and theories regarding bodily functions of the animal, and are illustrated by digrams, models, and prepared specimens.

In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of nerves and muscles, and on the special senses of animals.

Special emphasis is laid on the relation of normal physiological functions to the disturbances of function in disease and upon the physiological action of drugs.

It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with the succeeding course in Pathology, Therapeutics, and General Veterinary Medicine.

TEXT-BOOKS: Howell's Physiology, Smith's Veterinary Physiology.

CHEMISTRY.

(First Year.)

General Chemistry.—A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical Chemistry. The student is required to take notes on these lectures, which he must submit for examination. *Tuesdays, Thursdays,* and *Saturdays,* at 4.50. Professor MUNROE and Mr. SWETT.

Laboratory Practice.—A laboratory course for the study of the principles of chemistry which is designed to instruct students in the methods of conducting chemical experiments. Professor MUNROE and Professor PRICE.

TEXT-BOOKS: Holland's Medical Chemistry and Toxicology.

PHYSIOLOGICAL CHEMISTRY.

(Second Year.)

T. M. PRICE, M.S., Ph.D.....Professor of Physiological Chemistry
E. H. INGERSOLL.....Assistant

This course will consist of lectures and laboratory instruction, and includes the study of water from a sanitary standpoint; the chemical

examination of milk, the tissues and fluids of the body; the isolation of the digestive enzymes, and a study of their action in vitro.

MATERIA MEDICA AND THERAPEUTICS.

DAVID E. BUCKINGHAM, V.M.D.....Professor of Veterinary Materia Medica and Therapeutics
.....Demonstrator in Veterinary Materia Medica and Pharmacy
LOUIS B. CASTELL, Phar.D.....Lecturer in Botany

First year. (1) Lectures upon and demonstrations of drugs and their preparations and doses used in veterinary practice will be followed by recitations to assist in memorizing. (2) Practical exercises will be given in prescription writng, also a short course in Veterinary Pharmacology.

Third year. (1) Systematic lectures upon the physiological action of drugs and their effects in disease, their therapeutic uses, and their methods of administrtaion to animals. (2) Prescription writing, in which students are given hypothetical cases for which to prescribe. (3) The therapeutic application of various agencies not drugs.

TEXT-BOOK: Winslow's Veterinary Materia Medica and Therapeutics.

PRACTICE OF VETERINARY MEDICINE.

JOHN P. TURNER, V.M.D.....Professor of Veterinary Medicine

This subject is taught by a series of lectures, recitations, quizzes, and clinics extending over a period of two years.

The student is personally drilled in all the various diseases and doctrines taught in a well regulated veterinary school.

Especial attention is given to practical work whereby the student can become proficient in the diagnosis and treatment of disease.

Visits are required to the three veterinary hospitals in connection with the University, and personal attention is given students in visits to various large stables in and adjacent to the city of Washington, where practical instruction is given the second and third year classes in physical diagnosis among horses, cows, and hogs.

Equal attention is given diseases of cattle as of horses, whereby the student is properly fitted for either city or country practice.

Diseases of food-producing animals will be thoroughly explained.

TEXT-BOOKS: Friedberger and Froehner's Pathology and Therapeutics of Domestic Animals; Robertson's Practice of Equine Medicine; Williams' Principles and Practice of Veterinary Medicine; Fleming's Manual of Veterinary Sanitary Science and Police; Glass' translation of Müller's Diseases of the Dog.

VETERINARY SURGERY.

JOHN LOCKWOOD, V.S.....Professor of Veterinary Surgery
WM. P. COLLINS, D.V.S.,
Instructor in Clinical Veterinary Surgery and Restraint

The instruction given in this course embraces systematic lectures upon the principles and practice of Veterinary Surgery.

The different surgical operations are illustrated in clinic and upon the cadaver and the uses of all the important surgical instruments and appliances are demonstrated in the same manner. The use of anæsthetics, the practice of dental surgery and castration on all domestic animals will receive special attention.

TEXT-BOOKS: Moeller's Operative Veterinary Surgery; Fleming's Operative Veterinary Surgery; Hobday's Canine and Feline Surgery; Williams' Principles and Practice of Veterinary Surgery; Pfeiffer and Williams' Surgical Operations; White's Restraint of Domestic Animals.

BACTERIOLOGY AND PATHOLOGY.

FREDERICK FULLER RUSSELL, M.D.....Professor of Bacteriology and Pathology
(Curator Army Medical Museum.)
JOHN SWEYN NEATE, M.D.....Instructor in Bacteriology and Pathology

Bacteriology.—This subject comprises laboratory instruction in the fundamental principles and methods of pure bacteriology. Thorough drilling is given in the preparation of culture media, in disinfection, sterilization, staining, and the general methods of bacterial differentiation. Following this course, which is given daily during October, the further study of bacteria is taken up in connection with and as applied to pathology.

Pathology comprises the laboratory study of the general and special phenomena of inflammation, and a detailed study of the pathological processes found in the various diseases. The relation of bacterial and other microphytic life to disease processes and results is studied coincidentally and constitutes a course in applied bacteriology. In connection with the laboratory work a course of lectures and demonstrations is given upon immunity, serum therapy, and protective inoculation.

Surgical Pathology.—A special course in the healing of wounds and injuries and in the pathology of surgical operations is given in the third year.

Clinical Microscopy, comprising the study of the various tissues, fluids, ejecta, and dejecta, with a view to diagnosis of diseased conditions, is given in the first part of the third year.

TEXT-BOOKS: Delafield and Prudean's Pathology, Hiss & Zinsser's Text-book on Bacteriology.

CONTAGIOUS DISEASES AND SANITARY SCIENCE.

ADOLPH EICHHORN, D. V. S.,
Professor of Contagious Diseases and Sanitary Science
Assistant Professor of Sanitary Science and National Quarantine

The lectures in this course will be given with reference to the etiology, pathogenesis, symptoms, diagnosis, treatment, and prevention of the contagious diseases. Local and national regulations and measures governing the control and eradication of diseases will be clearly explained, with particular reference to the work of the United States Government in the eradication of contagious diseases.

MEAT HYGIENE.

ADOLPH EICHHORN, D.V.S.....Professor of Meat Hygiene

The subject involves the control of food animals destined for slaughter; their ante-mortem and post-mortem inspection with reference to the diseases which affect the wholesomeness of the meat. Further, the preparation of meat-food products, the various forms of preservation of meat and the conditions to which the meat and meat products are subject from the different infections and contaminations. The application of the Regulations of the Department of Agriculture in connection with the judgment of carcasses, meats, and meat-food products.

Practical demonstrations in meat inspection and judgment will be given at the local abattoirs.

TEXT-BOOK: Mohler and Eichhorn's translation of Edelmann's Meat Hygiene.

TEXT-BOOKS: Moore's The Pathology of Infectious Diseases of Animals; Friedberger and Froehner's Pathology and Therapeutics of Domestic Animals; Meat Inspection; Edelmann's; Mohler and Eichhorn translation.

ZOÖTECHNICS AND MILK HYGIENE.

B. T. WOODWARD, V.M.D.,
Assistant Professor of Milk Hygiene and Zoötechnics
E. H. RILEY, B.Agr.....Lecturer on Judging Animals
RALPH J. CARR, B.S.....Lecturer on Feeds and Feeding

The course covers the chief phases of live-stock work, including the judging, breeding, feeding, and management of horses, cattle, sheep, and swine.

It is introduced by discussions upon the origin of animal life, natural selections, the origin of breeds, and the domestication of animals.

The principles of breeding, heredity, environment, selection, indi-

vidual conformation, the history and development of breeds, principles of animal nutrition, balanced rations, practical feeding, and the economic production of beef, milk, mutton, and pork are given consideration.

Students obtain practical experience in the judging of the various breeds and classes of animals by visits to neighboring farms.

The course in Milk Hygiene will be given by lectures and demonstrations throughout the third year. The students will be taught the theory of milk secretion, the composition and characteristics of milk, the various methods of testing, together with the chemistry and bacteriology of milk, abnormal forms of milk, and diseases transmissible through milk to bovines and humans, with a study of the epidemics produced. Sanitary stabling and the sanitary handling of milk will be considered, showing the construction of various types of dairy barns and dairy houses, the manner of milking, care of the milk, and the varieties and care of dairy utensils; also a study of sterilization and pasteurization.

TEXT-BOOKS: Plumb's Types and Breeds of Farm Animals; Pearson's translation of Jensen's Essentials of Milk Hygiene; Henry's Feeds and Feeding.

VETERINARY ZOÖLOGY AND PARASITOLOGY.

HARRY W. GRAYBILL, M.S., B.A., D.V.M.,
Lecturer on Veterinary Zoölogy and Parasitology

This course will embrace Zoölogy and the various parasites with which the various domestic animals are infested. Instruction as to prevention, eradication, and the treatment of the diseases caused by them will be given.

TEXT-BOOK: Neuman, Animal Parasites.

VETERINARY OBSTETRICS.

HULBERT YOUNG, V.M.D...Assistant Professor of Veterinary Obstetrics

The course of instruction will consist of lectures on obstetrical anatomy, fœtal development, presentations, and the diseases incidental to the periods of gestation and parturition.

The lectures will be illustrated by diagrams, models, natural preparations, and other appliances for demonstrating the principles taught.

TEXT-BOOK: Fleming, Dalrymple.

HORSESHOEING.

HULBERT YOUNG, V.M.D.....Lecturer on Horseshoeing

The course is intended to familiarize students with the principles of shoeing, the examination of the feet and proper use of special shoes for relief of defects or disease.

TEXT-BOOK: Lungwitz on Horseshoeing, Adams' translation.

MILITARY PRACTICE.

HERBERT S. WILLIAMS, V.M.D.,
Clinical Instructor in Veterinary Military Practice
(U. S. Army, Fort Myer, Va.)

This course consists of lectures and demonstrations of purely military veterinary subjects, and is given at Fort Myer, Va., the cavalry and artillery post near Washington, D. C.

The subjects of saddling, bitting, and draft, together with the study of the proper conformation of animals used for military purposes, are included in this set of lectures.

The control of contagious diseases in army animals is also given special consideration.

VETERINARY JURISPRUDENCE.

WILLIAM W. BRIDE, A.B., LL.B..Lecturer on Veterinary Jurisprudence

A series of lectures upon the Law of Animals, including suggestions relating to the conduct of veterinarians as experts in the trial of cases involving the above law.

In addition to the foregoing courses of lectures, a number of Government experts have been engaged to give lectures on subjects of special interest to the veterinarian.

EXAMINATIONS AND DEGREE.

Examinations are held at the end of the course in each subject. Students failing in examinations will be permitted to be reëxamined at the next regular examination period. Students will not be admitted to examination unless they have paid all fees due at the time or present a permit signed by the Dean. In order to avail themselves of the privilege of reëxamination, students must file their written applications with the Dean not later than fifteen days before the date set for the examinations.

Proficiency is marked upon a scale of 100. A grade of 65 is required to pass an examination.

If a satisfactory examination is passed, the student receives the Degree of Doctor of Veterinary Medicine (D.V.M.).

THE VETERINARY LIBRARY.

This library is located in the Administration Building of the College of Veterinary Medicine, and is open from 8 a. m. to 10 p. m.

It contains, in addition to volumes on veterinary medical subjects, the current veterinary journals.

Provision is made in the annual library fee charged every student to add to it as published the important new works on veterinary medicine.

OTHER LIBRARIES.

Washington contains the Library of the Surgeon General's Office of the United States Army, the most complete medical library in the world. This library, as all other libraries of the Government, is open to the public between the hours of 9 a. m. and 4.30 p. m. There is also the Library of Congress and the many excellent libraries of the various other Government offices, in addition to the University Medical Library.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable only on first entry into the University)	$5
2. Library fee per annum	3
3. Tuition fee per annum	100
4. Fee for graduation	10

A deposit of $5 per annum is required of every student to cover loss, breakage, or damage to the property of the school. The amount of such deposit paid in excess of the breakage will be returned.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter-session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Secretary, and will be received only at the end of a quarter-session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use	$5
Microscope for Bacteriological, Pathological, and Clinical Microscopy Laboratory use	6

PAYMENT OF FEES.

All fees are to be paid to the clerk. Tuition fees are payable quarterly, in advance. Matriculation, library, and laboratory fees are payable in full, in advance.

For further information apply to

DAVID E. BUCKINGHAM, *Dean,*
The George Washington University,
College of Veterinary Medicine,
Washington, D. C.

Nos. 2113-2115 Fourteenth St., N. W.

PART IV.

STUDENTS IN THE UNIVERSITY.

DEGREES CONFERRED, MISCELLANEA.

Students Registered in the University, 1910-1911.

DEPARTMENT OF ARTS AND SCIENCES.

GRADUATE STUDIES.

In Attendance.

Name.	Legal residence.	City address.
Danner, Charles Eugene, Jr	N. C	1804 G Street.
Topic—Chemistry.		
Fuller, Aubrey Vail	D. C	2318 1st Street.
B.S., 1910, The George Washington University.		
Topics—Bacteriology and Chemistry.		
Grunwell, Paul Clifton	D. C	1805 Belmont Road.
B.M.E., 1907, The University of Kentucky.		
Topic—Chemistry.		
Johnson, Edward Carl	Minn	1815 Belmont Road.
A.M., 1907, University of Minnesota.		
Topic—Bacteriology.		
Potter, Alden Archibald	Minn	1815 Belmont Road.
B.S., 1909, University of Minnesota.		
Topic—Bacteriology.		
Shrader, James Houston	Md	309 D Street.
A.B., 1909, The George Washington University.		
Topic—Chemistry.		
Starbecker, Moses	N. Y	1104 5th Street.
B.S., 1910, College of the City of New York.		
Topic—Chemistry.		
Struble, George Wallace	Ore	The Benedick.
Graduate, 1908, United States Naval Academy.		
Topic—Chemistry.		

Doctor of Civil Law.

Oberlin, Paca	Va	416 5th Street.
LL.B., 1963, LL.M., 1904, Columbian University.		

Civil Engineer.

Lawrence, Glenn Rupert	D. C	238 Wilbur Ave., Columbus, Ohio.
B.S. in C.E., 1910, The George Washington University.		
Saum, Irving Randolph	D. C	207 Florence Court.
B.S. in C.E., 1910, The George Washington University.		

Electrical Engineer.

Name.	Legal residence.	City address.
Conwell, Rollin Nichol	Ind.	1302 Columbia Road.

Master of Sciences.

Castleman, Philip.....Mass.....1121 6th Street.
B.S., 1906, Harvard University.
Topics—Major, Chemistry; Minors, Preventive Medicine, Neurology.

Mackall, Colin Mackenzie.....Va.....915 16th Street.
A.B., 1909, B.S. in Chem., 1910, University of Virginia.
Topics—Major, Chemistry; Minors, Bacteriology, Geology.

Macmillan, Julia Theckla.....D. C.....600 Maryland Ave., N. E.
B.S., 1907, The George Washington University.
Topics—Major, Zoölogy; Minors, English, Zoölogy.

Mansfield, Wendell Clay.....N. Y.....1209 O Street.
B.S., 1908, Syracuse University.
Topics—Major, Paleontology; Minors, Zoölogy, Mineralogy.

Marsh, Allen Johnson.....D. C.....628 E Street, N. E.
B.S., 1910, The George Washington University.
Topics—Major, Chemistry; Minors, Bacteriology, Geology.

Radcliffe, Lewis.....N. Y.....633 A Street, N. E.
A.B., 1905, Cornell University.
Topics—Major, Zoölogy; Minors, Zoölogy, Bacteriology.

Valaer, Peter, Jr.....N. C.....421 P Street.
B.S., 1906, North Carolina Agricultural and Mechanical College.
Topics—Major, Chemistry; Minors, Bacteriology, Microscopy.

Master of Arts.

Baker, Mary Gertrude.....Ga.....1337 L Street.
B.S., 1909, Ohio Northern University.
Topics—Major, History; Minors, Philosophy, English.

Barnes, Charles Maurice.....Va.....Census Bureau.
A.B., 1910, The George Washington University.
Topics—Major, Economics; Minors, Sociology, History.

Bowker, Charles Harvey.....N. H.....1310 Vermont Ave.
M.D., 1892, Hahnemann Medical College.
M.D., 1900, National University.
A.B., 1909, The George Washington University.
Topics—Major, Bacteriology; Minors, Pathology, Zoölogy.

Bradshaw, May Paul.....D. C.....901 C Street, N. E.
A.B., 1909, The George Washington University.
Topics—Major, History; Minors, English, Economics.

Given, Mary Ella.....D. C.....1429 Clifton Street.
A.B., 1910, The George Washington University.
Topics—Major, English; Minors, Philosophy, Education.

Name. Legal residence. City address.

Hatton, Stewart P.....W. Va.....The Ardmore.
A.B., 1890, Ped. B., 1891, University of Missouri.
A.M., 1893, McGee College.
LL.D., 1904, La Mars College.
Topics—Major, Education; Minors, Philosophy, Psychology.

Lowe, Henry Francis.....D. C.....215 5th Street, N. E.
L.I., 1890, College of William and Mary.
B.S., 1903, The George Washington University.
Topics—Major, Psychology; Minors, Education, Political Science.

Magnusson, Leifur.....Minn.....118 3d Street, N. E.
A.B., 1905, University of Minnesota.
Topics—Major, Economics; Minors, Political Science, History.

Mayo, William Lee.....Md.....2017 G Street.
B.S., 1899, St. John's College.
Topics—Major, English; Minors, Economics, Sociology.

Plass, Joseph.....Germany....225 H Street.
A.B., 1910, The George Washington University.
Topics—Major, History; Minors, Archæology, English.

Pollock, William McCally.....W. Va.....The Balfour.
A.B., 1898, University of West Virginia.
Topics—Major, Chemistry; Minors, Chemistry, Bacteriology.

Rankin, John Owen.....Mo.....610 22d Street.
A.B., 1904, Tarkio College.
Topics—Major, Economics; Minors, Political Science, International Law and Diplomacy.

Schwartz, Claus Johann.....Germany....3526 11th Street.
A.B., 1908, The George Washington University.
Topics—Major, German; Minors, French, Education.

Scott, Mabel Lavinia.....D. C.....1455 Girard Street.
A.B., 1907, The George Washington University.
Topics—Major, German; Minors, English, History.

Wolfe, Bertha Frances.....Ind.....621 19th Street.
A.B., 1884, Southern Indiana Normal College.
Topics—Major, English; Minors, English, Philosophy.

Doctor of Philosophy.

*Alden, Levi Russell.....D. C.....809 L Street.
A.B., 1903, A.M., 1904, Columbian University.
Topics—Major, History; Minors, Law, History.

Churchill, George Morton.....Mass.....520 E Street, N. E.
A.B., 1896, Boston University.
A.M., 1909, The George Washington University.
Topics—Major, History; Minors, Economics, History.

Coffey, George Nelson.....N. C.....Bureau of Soils.
Ph.B., 1900, University of North Carolina.
M.S., 1908, The George Washington University.
Topics—Major, Geology; Minors, Mineralogy, Meteorology.

*Thesis requirement not completed.

Name. Legal residence. City address.

Custis, Horace Hatch.....D. C.....The Iroquois.
A.B., 1906, Johns Hopkins University.
A.M., 1908, The George Washington University.
Topics—Major, Chemistry; Minors, Geology, Bacteriology.

Gordon, Hayner Haskell.....Ohio.....1310 Girard Street.
B.S. in E.E., 1908, E.E., 1909, The George Washington University.
Topics—Major, Physics; Minors, Mathematics, Engineering.

Huddle, John Thomas.....D. C.....738 11th Street.
A.B., 1891, A.M., 1896, Roanoke College.
Topics—Major, Psychology; Minors, Philosophy, English.

Jenkins, Minnie.....N. Y.....Dept. of Agriculture.
B.S.A., 1907, M.S.A., 1909, Cornell University.
Topics—Major, Bacteriology; Minor, Chemistry.

Kent, Grace Helen.....Vt.....Gov. Hospital for Insane.
B.A., 1902, M.A., 1904, University of Iowa.
Topics—Major, Psychology; Minors, Psychology, Philosophy.

McBryde, Charles Neil.....Va.....The Iroquois.
B.S., 1891, University of South Carolina.
M.S., 1893, The Virginia Polytechnic Institute.
M.D., 1897, The Johns Hopkins University.
Topics—Major, Preventive Medicine; Minors, Botany, Geology.

McCaughey, William John.....Pa.....1503 N. Capitol Street.
B.S., 1906, University of Pennsylvania.
Topics—Major, Mineralogy; Minors, Geology, Chemistry.

*Marshall, Elmer Eugene.....D. C.....1372 Newton Street.
A.B., 1889, Ohio Wesleyan University.
S.T.B., 1904, Boston University.
Topics—Major, History; Minors, Philosophy, Biblical Literature.

Paine, Howard Shepard.....Ohio.....1438 Meridian Place.
A.B., 1902, Ohio University.
Topics—Major, Chemistry; Minors, Chemistry, Physics.

Ross, George Albert.....Mo.....2518 13th Street.
A.B., 1893, William Jewell College.
A.M., 1898, Columbian University.
Topics—Major, Mathematics; Minors, Education, Applied Mathematics.

Schoenfeld, Hans Fr. Arthur.....D. C.....Caracas, Venezuela.
A.B., 1907, A.M., 1909, The George Washington University.
Topics—Major, History; Minors, History, International Law.

Schwartz, Claus Johann.....Germany....3526 11th Street.
A.B., 1908, The George Washington University.
Topics—Major, German; Minors, French, Education.

*Solyom, Herbert Louis.....Md..... Buenos Ayres, Argentina.
B.S., 1902, M.S., 1903, Columbian University.
Topics—Major, Astro Physics; Minors, Meteorology, Practical Chemistry.

Swett, Otis Dow.....Md..... Chevy Chase, Md.
LL.B., 1891, LL.M., 1892, A.B., 1904, Columbian University.
M.S., 1909, The George Washington University.
Topics—Major, Chemistry; Minors, Chemistry, Bacteriology.

* Thesis requirement not completed.

Name. Legal residence. City address.

Symons, Thomas Baddeby.....Md.....College Park, Md.
B.S., 1902, M.S., 1904, Maryland Agricultural College.
Topics—Major, Zoölogy; Minors, Botany, Zoölogy.

Wiley, Edwin.....Va.....Library of Congress.
B.S., 1891, A.B., 1898, A.M., 1898, University of Tennessee.
Topics—Major, English; Minors, English, History.

*Young, Mrs. Julia Elektra Ludlow.N.Y.....Nat'l Cathedral School.
A.B., 1906, Columbia University.
M.A., 1909, The George Washington University.
Topics—Major, Greek; Minors, Latin, Archæology.

*Zerhusen, Francis Xavier.....Ky.....Holy Cross College, Brookland, D. C.
A.B., 1906, Notre Dame University.
Topics—Major, German; Minors, German, History.

UNDERGRADUATE COLLEGES.

The following list includes all undergraduate students. The registration is indicated by the abbreviations: A.&S., for College of Arts and Sciences; Eng., for College of Engineering and Mechanic Arts; C.P.S., for College of the Political Sciences; T.C., for Teachers College. The letters c., e., m., and a., after the abbreviation Eng., indicate that the student is a candidate for the bachelor's degree in Civil, Electrical, or Mechanical Engineering, or in Architecture; the absence of these letters indicates a special student.

Name. Legal residence. City address.

Adams, Ray R., A.&S.....Va.....Barcroft, Va.
Addison, John W., C.P.S.....Va.....Bureau of Corporations.
Allen, Harold Felton, Eng.m.....D. C..... 1012 B Street, S. E.
Altizer, Posey John, A.&S.....Ky.....941 H Street.
LL.B., 1908, The George Washington University.
Altman, Harry Loyd, A.&S.....Minn.....Weather Bureau.
Altman, Stanley B., Eng.c.....S. C.....1804 G Street.
Alvord, Katharine, A.&S.....D. C..... The Ontario.
Alvord, Margaret, A.&S.....D. C..... The Ontario.
Amateis, Roland Paul, Eng.c.....D. C..... 1124 Connecticut Ave.
Anderson, Hans Wilhelm Ferdinand, A.&S.....Germany....1829 19th Street.
Arctander, Edele K., A.&S.....Norway....1448 Rhode Island Ave.
Argo, Reamer Wilkes, Eng.c.....Md..... Y. M. C. A.
Armes, Jessie, A.&S.....D. C..... 1607 Irving Street.
Arnold, John Knox, C.P.S.....Ky.....1223 Harvard Street.
Arnold, Virginia Josephine, T.C..D. C.....2232 Decatur Place.
Avers, Henry Godfrey, A.&S....Ohio..... 84th Street, S. E.
Babcock, Henry H. Y., A.&S.....R. I..... 1320 Vermont Ave.
Baker, Henry Alban, A.&S.....W. Va..... 1108 16th Street.

* Thesis requirement not eompleted.

Name.	Legal residence.	City address.
Ball, Wm. Curtis Cooley, Eng.c.	Md.	824 6th Street, S. W.
Barb, Thomas V., C.P.S.	D. C.	1329 Penna. Avenue.
Barber, Charles Wightman, Eng.c.	D. C.	412 South Capitol Street.
Barndollar, Nannie Cramer, T.C.	D. C.	1352 Oak Street.
Barrett, Stanton E., C.P.S.	Wash.	814 I Street.
A.B., 1895, University of Rochester.		
Bashford, Margaret Josepha, T.C.	Va.	R. F. D., No. 2, Alexandria, Va.
Baston, George Henry, A.&S.	Me.	Bureau of Chemistry.
Batt, Joseph Harper, A.&S.	Del.	The Lenox.
Bayly, Howard Paul, Eng.c.	Me.	1333 11th Street.
Beale, Hilda, A.&S.	D. C.	2611 Adams Mill Road.
Beaman, Nelson Barry, C.P.S.	Mich.	1443 Mass. Ave.
Beauchamp, Edward Lassell, A.&S.	D. C.	1111 M Street.
Behrmann, Carl, A.&S.	Ill.	Y. M. C. A.
Beller, Lizzie Caroline, T.C.	D. C.	235 1st Street, N. E.
Bengston, Ida A., A.&S.	Nebr.	1931 17th Street.
Benners, J. N., C.P.S.	Ala.	1019 P Street.
Benton, Culmer C., A.&S.	Ind.	1826 G Street.
Benton, Ralph Webster, A.&S.	D. C.	462 O Street.
Berry, Louise, T.C.	Md.	1919 K Street.
Bevard, Katharine Harper, T.C.	D. C.	1423 R Street.
Bingham, Miles Franklin, A.&S.	Ohio	Chevy Chase, Md.
Bizzell, James Eustace, A.&S.	D. C.	The Burlington.
Black, James Earl, A.&S.	N. Y.	1225 O Street.
Blandford, Hannah McLean, T.C.	D. C.	220 8th Street, S. W.
Boesch, Paul Raymond, Eng.m.	Ill.	616 E Street, N. E.
Bontz, Mary Ellen, T.C.	Va.	422 N. Alfred Street, Alexandria, Va.
Bortman, Isaac M., A.&S.	Pa.	932 New York Avenue.
Bouson, Louise Elizabeth, T.C.	S. C.	607 4th Street.
Boutell, Hugh Gates, Eng.m.	Ill.	The Highlands.
Bowen, Norris Loring, C.P.S.	Va.	Clarendon, Va.
Bowen, Seth Thomas, Eng.c.	Ohio	1736 G Street.
Bradley, Paul Earl, C.P.S.	Ill.	Y. M. C. A.
Brady, Johnson Camden, Eng.	W. Va.	2435 18th Street.
Brakhagen, Minnie Hulda, A.&S.	D. C.	905 7th Street.
Brame, Arthur Hervey, Eng.e.	D. C.	1317 10th Street.
Brandes, Walter William, A.&S.	D. C.	1527 12th Street.
Brandt, Milton W., A.&S.	Ohio	1348 T Street.
Breneman, Claude Royal, A.&S.	Pa.	807 H Street.
Brennan, Rudolph Wills, C.P.S.	D. C.	1327 21st Street.
Breuninger, Henry L., Eng.m.	D. C.	18th and Park Road.
Broach, Emma, T.C.	Ga.	110 East Capitol Street.

Name.	Legal residence.	City address.
Brock, Thomas S., Eng.	D. C.	1430 W Street.
Brockwell, John, A.&S.	D. C.	1259 Morse Street, N. E.
Brooks, Charles W., Eng.	N. Y.	1321 N Street.
Ph.B., 1901, Brown University.		
Brown, Ammi, C.P.S.	Colo.	216 New Jersey Avenue.
A.M., 1902, Harvard University.		
Brown, Alvin McC., A.&S.	D. C.	Kenilworth, D. C.
Brown, Lee Hoxie, Eng.c.	D. C.	2464 Ontario Road.
Brown, Mary, T.C.	D. C.	2464 Ontario Road.
Brylawski, Hortense, A.&S.	D. C.	1912 Calvert Street.
Buchanan, M. Beverly, A.&S.	D. C.	3323 18th Street.
Buchanan, Omar Bailey, Eng.e.	D. C.	502 M Street.
Buck, Arthur Pierce, Eng.e.	Ohio	1453 S. C. Ave., S. E.
Bullough, George Van Ness, A.&S.	D. C.	122 Tenn. Ave., N. E.
Bundick, Clarence Albert, Eng.c.	D. C.	716 12th Street, N. E.
Burchard, Edwin Day, Eng.c.	D. C.	1113 S Street.
Burden, Katherine, A.&S.	D. C.	The Franklin.
Burke, Ellen Teresa, A.&S.	D. C.	Brightwood Park, D. C.
Burnett, Lyle Black, A.&S.	Mo.	2224 F Street.
Burrell, William Webster, Eng.m.	D. C.	2129 Penna. Avenue.
Burrows, Termaine K., C.P.S.	N. Y.	2323 Ontario Road.
Byrne, George Aloysius, A.&S.	D. C.	105 Maryland Ave., N. E.
Cade, W. Roscoe, A.&S.	D. C.	1303 Wallach Place.
Callaghan, Margaret Gertrude, T.C.	Md.	3901 Grant Road.
Callister, Edward Richard, A.&S.	Utah	215 Senate Office Bldg.
Cameron, Myrle, A.&S.	D. C.	16th and Emerson Sts.
Campbell, Orland, A.&S.	D. C.	1343 Harvard Street.
Campbell, William D., C.P.S.	Tenn.	1830 G Street.
Carpenter, Lillian Evans, T.C.	D. C.	205 D Street, N. E.
Carter, Francis Edward, A.&S.	Va.	Episcopal High School.
Carty, Roy Franklin, Eng.m.	D. C.	Bureau of Standards.
Cash, Edith Katherine, A.&S.	D. C.	126 Tenn. Ave., N. E.
Chace, Eunice Lucretia, T.C.	Md.	Berwyn, Md.
Chang, Tien Yuen, C.P.S.	China	Chinese Legation.
M.A., College of Languages, China.		
Chapin, Mabel Louise, A.&S.	D. C.	519 Stanton Place, N. E.
Chapman, Thomas Hutchinson, A.&S.	D. C.	129 F Street.
Chase, Harry Guy, Eng.e.	D. C.	320 Maryland Ave., N. E.
Cheney, Edith, A.&S.	D. C.	816 Taylor Street.
Chien, Shii Fan, C.P.S.	China	Chinese Legation.
Chowning, James William, Eng.	Mo.	938 Rhode Island Ave.
Chubb, Herman Blaney, C.P.S.	D. C.	The Lenox.
Church, Grace Ella, A.&S.	D. C.	626 North Carolina Ave.

Name.	Legal residence.	City address.
Claflin, Roy Cleon, Eng.c	Ill.	3223 Warder Street.
Claiborne, Hamilton Cabell, C.P.S.	Va.	1922 I Street.
Claveloux, Frank, A.&S.	D. C.	2000 N. Capitol Street.
Cochrane, John Edw. Walker, Eng.c	D. C.	1416 K Street.
Cockrell, Selwyn Kennedy, A.&S.	D. C.	1050 W. Fayette Street, Baltimore, Md.
Coe, Mayne R., A.&S	N. C.	Langdon, D. C.
Cohen, William I., Eng	Minn.	617 K Street.
Collins, Georgie A., A.&S	N. Y.	2719 11th Street.
Collins, Karrick Pelouze, C.P.S.	Colo.	The Grafton.
Collins, William Moore, A.&S.	D. C.	1417 G Street, N. E.
Connelly, Mary Ann, T.C	D. C.	1438 S Street.
Connor, Daniel Allman, Eng.c.	D. C.	130 D Street, S. E.
Conwell, Rollin Nichol, Eng.e.	Ind.	1302 Columbia Road.
Copeland, Leland Stanford, A.&S.	Mo.	1227 Harvard Street.
Corby, Karl W., A.&S	D. C.	1430 Fairmont Street.
Coulon, Eugene E., C.P.S	La.	The Domariscotta.
Coulson, Margaret Holmes, T.C.	Ala.	Dumbarton Court.
Coumbe, Edward Celestine, A.&S.	Wash.	1433 Rhode Island Ave.
Craig, Harold Kennedy, Eng.c.	D. C.	2206 1st Street.
Craighill, Susan Robins, T.C	D. C.	3062 Q Street.
Crason, Elly Brown, A.&S	Va.	619 14th Street.
Creswell, C. F., A.&S	Pa.	2016 G Street.
Crosby, Willard McNeil, A.&S.	N. Y.	1103 6th Street.
Crowe, John Joseph, A.&S	D. C.	Bureau of Standards.
Crown, James Edmund, Eng.m.	D. C.	221 10th Street, S. E.
Cullom, Edward, A.&S	Tenn.	2023 I Street.
A.B., 1904, University of Nashville. A.M., 1910, The George Washington University.		
Dans, José P., Eng	P. I.	Coast and Geodetic Sur.
Darcey, James Francis, Eng	D. C.	2140 I Street.
Davis, Fred Philip, A.&S	N. H.	119 T Street.
Davis, Warren Jefferson, C.P.S.	Va.	The Cumberland.
Day, Elizabeth Cathcart, A.&S.	D. C.	2511 Cliffbourne Place.
Deal, Alice, A.&S	Md.	The Victoria.
A.B., 1899, Woman's College.		
Deal, Roy Linney, A.&S	N. C.	1433 Rhode Island Ave.
De Baun, Claud, C.P.S	Ariz.	1132 8th Street.
Degenhardt, George Albert, Eng.c.	D. C.	1227 Wisconsin Avenue.
Degnan, George A., Eng.m	Pa.	450 M Street.
Dembrovsky, William Louis, A.&S.	Russia	708 H Street, N. E.
Deyo, Clarence Eugene, A.&S.	Conn.	Y. M. C. A.
Dobyns, Dorothy, A.&S	D. C.	1957 Biltmore Street.

Name.	Legal residence.	City address.
Dodd, Philip Lindsley, C.P.S.	N. J.	824 Connecticut Avenue.
A.B., 1908, Rutger College.		
Dolliver, Garrett Brown, A.&S.	S. D.	Y. M. C. A.
Donegan, James J., A.&S.	D. C.	1912 Jackson St., N. E.
Donk, Peter J., A.&S.	Fla.	The Brunswick.
Donk, Marion Gilbert, Eng.	Fla.	The Brunswick.
B.S., 1898, Florida Agricultural College.		
A.B., 1901, Harvard University.		
B.S. in C.E., 1910, George Washington University.		
Dougherty, Howard Francis, Eng.c.	Md.	824 13th Street.
Draper, Anne Elizabeth, A.&S.	N. Y.	1330 Vermont Avenue.
Dugan, John A., Eng.m.	D. C.	3419 Dent Place.
Dulin, Wm. Shelton Gordon, Eng.c.	D. C.	1420 Penna. Avenue.
Dunbar, Ralph McNeal, A.&S.	Md.	Y. M. C. A.
Dunlap, Henrietta Frances, T.C.	D. C.	1622 19th Street.
Dutton, Donald Langley, Eng.c.	D. C.	1721 Kilbourne Place.
Dwyer, John Rochford, Eng.c.	D. C.	628 F Street, S. W.
Eberly, Clarence F., A.&S.	Ohio	1733 19th Street.
Eddingfield, Ina Deane, T.C.	D. C.	1440 Harvard Street.
Edmonds, R. W., A.&S.	D. C.	1239 Irving Street.
Edson, Suzane Grace, A.&S.	Vt.	2818 13th Street.
A.B., 1907, Smith College.		
Edwards, Mary Beulah, T.C.	S. C.	1224 13th Street.
Egbert, Freda Dorothy, T.C.	D. C.	1739 1st Street.
Eiker, Mattie, A.&S.	D. C.	1006 Otis Place.
Elwood, William Adam, Eng.c.	D. C.	635 F Street, N. E.
Engel, Morris Edward, Eng.m.	Pa.	1016 S. C. Ave., S. E.
Estler, Harry Smith, Eng.m.	Va.	1245 31st Street.
Evans, Lulu Mae, A.&S.	Mo.	200 A Street, S. E.
Evans, William Vincent, A.&S.	Mont.	1217 Decatur Street.
Falconer, Hope Haines, Eng.	Va.	9 S Street.
Fant, Jessie Du Bois, T.C.	Idaho	115 12th Street, S. E.
Farnham, Arthur Blanchard, Eng.c.	D. C.	1774 U Street.
Farwell, Clarence Gilbert, A.&S.	Mass.	1511 13th Street.
A.B., 1910, The George Washington University.		
Faunce, Mary E., A.&S.	D. C.	317 11th Street, S. W.
Ferguson, Elizabeth, A.&S.	D. C.	1239 Kenyon Street.
Fickas, Melville P., A.&S.	Ariz.	Civil Service Com.
Fickling, Evalina Judith, T.C.	D. C.	312 A Street, N. E.
Finch, Elmer Harrison, Eng.c.	Mich.	Geological Survey.
Finkelstein, Henry Charles, C.P.S.	D. C.	Bond Building.
Finkelstein, Reuben, T.C.	D. C.	616 M Street, N. W.
Fitch, William Reed, A.&S.	N. D.	The Sherman.
Fleming, John Paton, A.&S.	Va.	1861 Wyoming Avenue.

Name.	Legal residence.	City address.
Freeman, Le Roy A., Eng.c.	D. C.	46 V Street.
Frey, Ralph Wylie, A.&S.	D. C.	1343 Q Street.
Frizzell, Genevieve Margaret, A.&S.	D. C.	241 8th Street, N. E.
Fuller, Aubrey Vail, A.&S.	D. C.	2318 1st Street.
B.S., 1910, The George Washington University.		
Fulton, William Duane, Jr., C.P.S.	Ohio	1404 M Street.
Fultz, Miles Evan, Eng.e.	D. C.	320 4½ Street, S. W.
Galbraith, Esther Elizabeth, A.&S.	D. C.	3512 14th Street, N. E.
Gardner, Helen Burnett, T.C.	D. C.	623 East Capitol Street.
Gardiner, Martin Earl, C.P.S.	Ill.	1104 13th Street.
Gentzkow, Cleon J., A.&S.	Minn.	1323 Q Street.
Geschickter, Jeanette, A.&S.	D. C.	1239 12th Street.
Giantvalley, Earl Arnold, A.&S.	Minn.	National Museum.
Gill, Calvert Burke, Eng.e.	Md.	219 N. Calvert Street, Baltimore, Md.
Gilliss, Helen, T.C.	D. C.	1307 Kenyon Street.
Gillmore, Stuart Hagner, A.&S.	Va.	1700 15th Street.
Glass, Robert Lewis, Eng.e.	D. C.	1524 Columbia Street.
Glikstein, Nathan H., A.&S.	Wis.	1378 Harvard Street.
Goding, Anne M., T.C.	D. C.	1419 R Street.
Goebel, Annie Pauline, T.C.	D. C.	3333 Prospect Avenue.
Gonzalez-Lamas, Antonio, Eng.c.	P. R.	908 15th Street.
Gordon, Helen, T.C.	Ill.	1627 Lamont Street.
Gore, Michael Alvord, A.&S.	D. C.	1147 N. H. Avenue.
Graff, Leva Bee, A.&S.	Ill.	Dewey Hotel.
A.B., 1906, Woman's College.		
Graham, Edgerton G., Eng.	D. C.	616 Keefer Place.
Granger, Roy T., C.P.S.	Colo.	1206 K Street.
B.A., 1905, Cornell College, Iowa.		
Green, Elsie Eugenia, A.&S.	D. C.	600 23d Street.
Greenberg, Louis, A.&S.	D. C.	612 N Street.
Greenwald, Harold Putnam, Eng.c.	D. C.	1749 Lanier Place.
Greenway, Charles Thomas, A.&S.	Iowa	2003 H Street.
Grinnell, A. G., C.P.S.	R. I.	Y. M. C. A.
Grouard, Maria Louise, T.C.	D. C.	1600 Scott Circle.
Guy, Arthur Randolph, Eng.m.	D. C.	1729 19th Street.
Gwinn, Thomas R., Eng.	Md.	1026 17th Street.
B.S. in E.E., 1910, The George Washington University.		
Hagar, William Valla, Eng.c.	Vt.	200 E Street.
A.B., 1909, Middlebury College.		
Haines, Ora E., A.&S.	D. C.	Civil Service Com.
Halsey, Arthur Sherman, Eng.m.	Pa.	207 East Capitol Street.
Hamlin, Herbert Samuel, A.&S.	Utah	2517 14th Street.

Name.	Legal residence.	City address.
Hammond, Bennett, Eng.e	Pa.	1845 Monroe Street.
Handelsman, Samuel, A.&S	N. Y.	719 3d Street.
Hansen, Wilhelm Gustav, C.P.S.	D. C.	728 3d Street, N. E.
Hanson, Frank Blair, A.&S	Ill.	Elvaton, Md.
Hantzman, William Henry, A.&S.	D. C.	17 4th Street, S. E.
Hanvey, Edna E., A.&S	D. C.	1315 Emerson Street.
Hardell, John William, Eng	D. C.	906 P Street.
Hardell, Lelia B., A.&S	D. C.	906 P Street.
Harden, Fred Geer, C.P.S	Nebr.	231 B Street, N. E.
Hardin, Alene, A.&S	D. C.	The Cairo.
Hardy, Margaret Boude, A.&S.	D. C.	638 East Capitol Street.
Harper, Charles W., Eng	S. C.	1008 10th Street.
Harrington, George Traver, A.&S. B.S., 1909, University of Vermont.	Vt.	1120 Virginia Avenue.
Harris, Albert L., Eng.a	England	1505 Lamont Street.
Harrison, Robert Horace, Eng.c.	D. C.	2208 1st Street.
Harter, Eugene C., A.&S	Ohio	2019 N. Capitol Street.
Haslup, Alice Elma, T.C	Md.	2114 18th Street.
Hawkins, Margaret Amelia, T.C.	D. C.	1228 Fairmont Street.
Haycock, Robert Lee, T.C	D. C.	2525 Wisconsin Avenue.
Hayden, Leo J., C.P.S	Mich.	1715 Lincoln Ave., N. E.
Haynes, Albert, A.&S	Tenn.	939 L Street.
Hearne, Susan Snell, A.&S	Mo.	1307 P Street.
Heisley, George Edgar, Eng	D. C.	638 5th Street, N. E.
Hendrix, Byron M., A.&S	Ohio	1302 Irving Street.
Hendry, M. Leland, A.&S	Md.	Bethesda, Md.
Heron, Louis Mann, Eng.e	D. C.	1321 11th Street.
Herring, Charles Eldred, C.P.S.	D. C.	The Plymouth.
Hession, John H., Eng.c	Mass.	1419 W Street.
Hiatt, Charles Edward, A.&S	N. C.	230 New Jersey Avenue.
Hicks, Russell E., A.&S	Md.	Rockville, Md.
Hilleary, Mary Beatrice, T.C	D. C.	3314 P Street.
Hitchcock, Horace Dailey, A.&S.	Kans.	1720 Newton Street.
Hobbs, Enid Marian, A.&S	Canada	1364 Perry Place.
Hobson, Frank Millard, Eng.c	D. C.	2013 G Street.
Hodgkins, George Wilson, A.&S.	D. C.	1830 T Street.
Hodgkins, Howard Wilkinson, Eng.c	D. C.	1830 T Street.
Hoffman, Edwin S., Eng.e	Pa.	1007 Mass. Ave., N. E.
Holden, Brigid Elizabeth, T.C	D. C.	488 I Street, S. W.
Holder, Herbert Stanley, Eng	Iowa	110 F Street, S. E.
Hole, Myra Cadwalader, A.&S	Nebr.	1215 Harvard Street.
Holmes, Ronald M., A.&S	D. C.	726 3d Street, N. E.

Name.	Legal residence.	City address.
Hood, William Ross, T.C. A.B., 1900, Howard College, Ala.	Ala.	U. S. Bureau of Educ'n.
Hooker, William A., C.P.S.	D. C.	1829 G Street.
Hospital, Ralph, A.&S.	D. C.	3500 15th Street, Brookland, D. C.
Hough, Roland P., Eng.c.	Va.	Clarendon, Va.
Houghton, Carlos Cranford, A.&S.	D. C.	2011 Kalorama Road.
Hoult, Geneva Frances, A.&S.	Ill.	23 1st Street, N. E.
Howard, Frank Atherton, Eng.m.	D. C.	1733 R Street.
Howard, Lela, A.&S.	Mich.	2610 Garfield Street.
Howell, Willie H., A.&S.	W. Va.	329 F Street, N. E.
Hughes, Lotus Graham, C.P.S.	D. C.	No. 705, Munsey Bldg.
Hughes, Margaret Louisa, T.C.	D. C.	315 B Street, N. E.
Hughes, William G., Eng.m.	D. C.	The Eutaw Apts.
Hulsizer, Robert Inslee, Eng.e.	Mass.	310 C Street.
Hummer, Elizabeth Alice, A.&S.	D. C.	638 East Capitol Street.
Huse, Kenneth, Eng.	Mass.	1229 Evarts Street.
Ingersoll, Edwin Henry, A.&S.	D. C.	Bu. A. I., Dept. Agric.
Ingram, Charlton Weber, Eng.m.	D. C.	211 7th Street, N. E.
Jackson, Maude Lillian, A.&S.	D. C.	3630 13th Street, N. E.
Jacobi, Herbert J., Eng.	D. C.	1855 Calvert Street.
Janer, Ramon Isaac, C.P.S.	Porto Rico.	Apt. 16, The Maxwell.
Janney, Grace McPherson, T.C.	D. C.	1006 Rhode Island Ave.
Jeffrey, Frank Rumer, A.&S.	Wash.	1433 Rhode Island Ave.
Jenkins, Oliver Lloyd, Eng.m.	Ind.	218 6th Street, S. E.
Jenks, R. G., C.P.S.	D. C.	951 Massachusetts Ave.
Johnson, Charles Albert, T.C.	D. C.	2837 12th Street, N. E.
Johnson, Robert, C.P.S.	Mo.	1304 Belmont Road.
Johnson, Ross Holbrook, A.&S.	D. C.	1804 Belmont Road.
Johnston, Anna E., A.&S.	Ohio.	Civil Service Com.
Jones, Eleanor Isabelle, A.&S.	D. C.	1440 Meridian Place.
Jordan, Isabel Louise, T.C.	D. C.	Hotel Stratford.
Justement, Louis Henri Eugene, Eng.a.	D. C.	914 L Street.
Kalman, Lasser, C.P.S.	N. Y.	142 A Street, N. E.
Kause, Robert Lincoln, Eng.c.	Ohio.	1905 Jackson Street, N. E.
Kaye, Frank B., A.&S.	D. C.	1258 Morse Street, N. E.
Keats, Harold, A.&S.	D. C.	930 18th Street.
Keiter, William Isaiah, A.&S.	Pa.	2431 N Street.
Kelley, Eva Phelps, A.&S.	Iowa.	213 Holly Ave., Takoma Park.
Kelly, Walker E., C.P.S.	D. C.	19 5th Street, S. E.
Kemmerer, Charles Tilghman, C.P.S.	Iowa.	Apt. 32, 1115 8th Street.

Name.	Legal residence.	City address.
Kemper, Graham, C.P.S.	Ky.	951 Massachusetts Ave.
B.S., 1896, Kentucky University. M.S., 1897, Kentucky State College.		
Kennedy, Charles Bayard, Eng.c.	D. C.	1304 13th Street.
Kent, Henry J., Eng.	Mass.	3145 Mt. Pleasant Street.
Kent, Lavinia Grace, A.&S.	Me.	21 6th Street, N. E.
Kerby, Katharine, A.&S.	D. C.	2606 L Street.
King, James Alvin, Eng.	Ind.	819 5th Street.
King, Myrtle Virginia, A.&S.	D. C.	328 10th Street, N. E.
Kingsbury, Joseph B., A.&S.	Iowa.	Y. M. C. A.
Kinsell, Rex Emir, A.&S.	Iowa.	1335 Mass. Ave., S. E.
Kirk, Theodore Tilton, Eng.c.	Ky.	1309 Delafield Place.
Kisseleff, Charles William, A.&S.	N. J.	1517 5th Street.
Kittredge, Scott F., C.P.S.	Me.	50 M Street.
Kouns, J. Lewrain, A.&S.	Ky.	1406 15th Street.
Kuehn, Herman A., Eng.c.	Ind.	411 P Street.
Kunkel, Fred E., A.&S.	Pa.	1538 17th Street.
Lamson, Frank S., Eng.e.	D. C.	2439 18th Street.
Lasier, Emery Liebschutz, A.&S.	N. H.	1427 Girard Street.
Lasley, Dana McGuffey, Eng.m.	D. C.	The Albemarle.
Lauck, Lee G., A.&S.	W. Va.	1445 Massachusetts Ave.
Lawson, Margaret Lucile, T.C.	D. C.	815 C Street, N. E.
Lay, Tracy, C.P.S.	Ala.	House of Rep. Office Bldg.
Le Duc, Percy Walborne, Eng.c.	D. C.	817 Varnum Street.
Lee, Lelia, T.C.	D. C.	515 10th Street, N. E.
Le Febvre, Clarence Charles, T.C.	Wis.	1537 I Street.
A.B., 1907, University of Wisconsin.		
Leland, Florence Ruth, A.&S.	D. C.	206 5th Street, S. E.
Leonard, Lewis Thompson, A.&S.	D. C.	520 G Street, N. E.
Leonard, William Michael, Eng.e.	D. C.	520 G Street, N. E.
Lepper, Henry Albert, A.&S.	D. C.	1620 6th Street.
Levine, Joseph Carsdon, C.P.S.	N. Y.	941 H Street.
Lewis, Alex S., A.&S.	N. Y.	1104 5th Street.
Lewis, Erna Watson, T.C.	D. C.	R. F. D., No. 4, Washington, D. C.
Liebschutz, Eugenie, T.C.	France.	2005 G Street.
Lind, Ida May, T.C.	D. C.	506 A Street, N. E.
Lindsay, Adna, T.C.	Ind.	123 A Street, N. E.
Litchfield, Henry Edward, Eng.	D. C.	308 L Street, S. E.
Littleton, Laura, A.&S.	Kans.	1822 Park Road.
Liu, Yu Hu, C.P.S.	China.	Chinese Legation.
M.A., College of Languages, China.		
Lloyd, Egbert Thompson, Eng.	D. C.	2604 Connecticut Ave.

Name.	Legal residence.	City address.
Llufrio, Albert Vincent, A.&S.	D. C.	618 8th Street, N. E.
Lodholz, Louis, A.&S.	Pa.	1008 N. H. Avenue.
Love, Albert Lee, T.C.	Miss.	Census Bureau.
S.B., 1906, Miss. Agr'l and Mechanical College.		
Love, Harry Donald, Eng.e.	Mich.	214 E Street.
Lovering, George Varnum, A.&S.	Mass.	2715 13th Street.
Lowe, Edith Blinston, A.&S.	D. C.	2622 Woodley Place.
Luckings, Harry C., A.&S.	N. J.	522 7th Street, N. E.
Luebkert, Timm Adolph, Eng.c.	D. C.	1314 Kearney Street, Brookland, D. C.
Lugo-Vina, Wences, A.&S.	P. R.	214 A Street, N. E.
Luhn, Harriet Emma, T.C.	D. C.	1407 15th Street.
Lusby, Charles Edward, A.&S.	D. C.	2909 O Street.
McAdams, Ralph W., Eng.c.	Kans.	507 B Street, N. E.
McCabe, Lulu Mignonne, A.&S.	Kans.	3469 14th Street.
McCalip, Curtis Edgar, Eng.e.	Ind.	111 13th Street, S. E.
McConnell, Harry Raymond, Eng.m.	Va.	218 6th Street, S. E.
McCormick, John D., Eng.c.	D. C.	1377 N. C. Ave.
McCubbin, Charles Carr, Eng.	Md.	423 10th Street.
MacFarlane, Nellie Rae, T.C.	D. C.	1719 13th Street.
McKiernan, Charles Patrick, C.P.S.	Conn.	429 6th Street.
A.B., 1906, Yale University.		
McKnew, Jane Marion, T.C.	D. C.	2112 G Street.
McLachlen, Lanier P., C.P.S.	D. C.	2800 Ontario Road.
McMahon, John G., C.P.S.	D. C.	1202 N. Capitol Street.
Maddox, William Johnston, C.P.S.	D. C.	42 Q Street, N. E.
Magruder, Oliver Graham, Eng.c.	D. C.	54 U Street.
Manning, Thomas R., A.&S.	Pa.	254 9th Street, N. E.
Marcus, Mandel, C.P.S.	Wis.	1378 Harvard Street.
Marks, Joseph, Eng.c.	D. C.	903 F Street, N. E.
Marshall, William Francis, C.P.S.	R. I.	1736 G Street.
Martin, Henriette H., A.&S.	France	1719 13th Street.
Marvin, Francis Edwin, Eng.e.	D. C.	606 F Street, N. E.
Mason, Charles S., A.&S.	D. C.	2207 Franklin St., N. E.
Mason, Josephine Dwight, T.C.	Mass.	132 A Street, N. E.
Mason, Samuel Worcester, Eng.e.	D. C.	308 B Street, N. E.
Mason, Winfield Scott, C.P.S.	Calif.	224 3rd Street.
Mattingly, Gentry Heard, Eng.e.	D. C.	475 F Street, S. W.
Maupin, William Firey, A.&S.	N. C.	3021 N Street.
Maxcy, Kenneth Fuller, A.&S.	D. C.	1118 Rhode Island Ave.
Maxson, Louis Archer, A.&S.	Md.	Kensington, Md.
Mayfield, Charlotte Virginia, A.&S.	D. C.	1912 Biltmore Street.

Name.	Legal residence.	City address.
Mayne, John Clark, A.&S.	D. C.	4201 Georgia Avenue.
Meier, Julius Earnest, A.&S.	Ohio.	415 9th Street, N. E.
Menzel, Margaret L. T., A.&S.	D. C.	1920 G Street.
Merritt, Leonard Atkins, C.P.S.	Minn.	154 F Street, S. E.
LL.B., 1904, LL.M., 1905, The George Washington University.		
Middleton, Herbert Paul, Eng.c.	N. Y.	Room 409, Union Trust Building.
Miller, Allison Naylor, A.&S.	D. C.	Cleveland Park.
Miller, Dayton B., A.&S.	D. C.	Langdon, D. C.
Milliken, Florence Ethel, T.C.	D. C.	463 P Street.
Monayway, James Lewis, A.&S.	Ala.	1454 Fairmont Street.
Monk, Ella May, T.C.	D. C.	3025 15th Street.
Pd.B., 1906, New York State Normal College.		
Moody, Theodore Lyman, Eng.c.	Md.	1512 P Street.
Moore, Helen Barbara, A.&S.	D. C.	1255 I Street, N. E.
Moore, Kate Carroll, A.&S.	D. C.	2024 15th Street.
Moran, Robert H., Eng.e.	D. C.	1935 Biltmore Street.
Morehouse, Alanson D., C.P.S.	D. C.	1526 O Street.
Moreland, John Edwin, Eng.	D. C.	1113 15th Street.
Morris, Daniel Leigh, Eng.e.	D. C.	63 S Street.
Morse, Elisha W., C.P.S.	D. C.	1723 Willard Street.
Moudy, Alvin Curtis, Eng.c.	Texas	126 Winder Building.
Muench, Elsa Dorothea, A.&S.	D. C.	1354 Monroe Street.
Mullen, Charles E., C.P.S.	Wis.	1914 H Street.
Munson, R. H., C.P.S.	D. C.	The Grafton.
Murray, Charles N., C.P.S.	D. C.	1835 Monroe Street.
Murray, Susan Harriet, A.&S.	D. C.	3309 O Street.
Murray, Thomas Patrick, Eng.	Mass.	1902 H Street.
Myers, Henry Bernard, Eng.c.	Md.	729 15th Street.
Nairn, William Wallace, Jr., Eng.	D. C.	901 Lawrence Street, Brookland, D. C.
Nash, James P., Eng.c.	Pa.	718 19th Street.
Nelson, Roy W., A.&S.	Nebr.	211 New Jersey Avenue.
Newbold, Katharine Mitchell, A.&S.	D. C.	11 Irving Street, Chevy Chase.
Newton, Grace Gadsdon, T.C.	D. C.	1452 Fairmont Street.
Nicholson, Helen Sellman, A.&S.	D. C.	2821 Q Street.
Nickerson, Chester Arthur, A.&S.	Wis.	508, Y. M. C. A.
Nielsen, Joseph Nicolay, Eng.a.	Ill.	1615 Florida Avenue.
Nordhoff, Bertha Alma, T.C.	D. C.	1538 Columbia Street.
Norris, Rhesa Niles, Eng.m.	D. C.	2121 O Street.
North, Hilda, T.C.	D. C.	2807 14th Street.
Nutt, George Sinclair, A.&S.	Ill.	2124 Penna. Avenue.

Name.	Legal residence.	City address.
Nyman, A. O., A.&S.	Ill.	Apt. 43, The Plymouth.
Offutt, Viola, T.C.	Md.	Bethesda, Md.
Olson, Oliver M., A.&S.	Iowa.	807 11th Street.
O'Neal, Warwisk Christy, C.P.S.	D. C.	1713 15th Street.
C.E., 1906, Pennsylvania Military College.		
Ossire, Cora Amelia, T.C.	D. C.	2729 Ontario Road.
Osterhout, Karl Jackson, A.&S.	D. C.	U. S. Bureau of Mines.
Otto, Arnold Clarence, C.P.S.	Wis.	1717 S Street.
Outwater, Mrs. Kate Sorrell, T.C.	Va.	620 F Street, S. W.
Palmer, Elizabeth Downer, T.C.	D. C.	2818 13th Street.
Panopio, Eliseo M., Eng.	P. I.	Coast and Geodetic Sur.
Papson, Edward Taylor, A.&S.	D. C.	127 11th Street, N. E.
Parker, Edwin Pearson, Jr., Eng.e.	D. C.	1752 Ontario Place.
Parks, George Edward, A.&S.	D. C.	2463 6th Street.
Parry, William, Eng.e.	Pa.	1518 Columbia Street.
Patterson, Ruth Capelle, T.C.	D. C.	2016 15th Street.
Pearce, Lida Marie, T.C.	D. C.	1737 S Street.
Peterson, Frank Daniel, Eng.c.	Ill.	214, Y. M. C. A.
Petrovitch, Woislav M., C.P.S.	Servia.	Dumbarton Court.
A.B., 1910, The George Washington University.		
Pevare, John Francis, A.&S.	N. H.	2219 1st Street.
Phillips, Humphrey B., C.P.S.	England.	British Embassy.
Phillips, John Andrew, Eng.c.	D. C.	943 S Street.
Phillips, Vera Marie, A.&S.	D. C.	3327 18th Street.
Pierce, Flora, A.&S.	D. C.	921 Westminster Street.
Pierce, James Francis, Eng.	Mich.	908 S Street.
Piggott, Mary Elizabeth, T.C.	Va.	East Falls Church, Va.
Piper, Edgar Raymond, Eng.c.	D. C.	2605 Adams Mill Road.
Plummer, Willis Jordan, C.P.S.	Va.	1100 13th Street.
Poole, George, Eng.m.	D. C.	903 E Street, S. E.
Pope, Ruth V., A.&S.	D. C.	1435 Monroe Street.
Potbury, Robert John, Eng.c.	D. C.	1131 Euclid Street.
Potter, Charles Hollister, A.&S.	N. C.	1840 California Street.
Powell, William Franklin, C.P.S.	D. C.	317 John Marshall Place.
Pozen, Morris A., A.&S.	D. C.	739 13th Street.
Prentiss, Augustin Mitchell, Eng.c.	S. C.	1727 Church Street.
Price, Lawrence P., A.&S.	Pa.	227, P. O. Department.
Putnam, May, A.&S.	N. Y.	2025 O Street.
Quencer, Clinton A., A.&S.	N. Y.	1828 H Street.
Rager, Amy Elizabeth, A.&S.	D. C.	812 21st Street.
Raymond, Norman Ticknor, A.&S.	D. C.	Apt. 301, The Alabama.
Reavis, Andrew Bryant, A.&S.	Tenn.	Patent Office.
Reavis, Joseph P., A.&S.	Tenn.	The Northumberland.

Name.	Legal residence.	City address.
Redfield, Arthur Huber, A.&S.	D. C.	9 Randolph Place, N. E.
Reeve, Felicia Ann, T.C.	D. C.	1626 19th Street.
Reges, Max. F., Eng.c.	Pa.	117 K Street, N. W.
Reinburg, George Everett Adams, A.&S.	D. C.	1453 Chapin Street.
Renner, Wilbert Vernon, Eng.c.	D. C.	1405 F Street.
Requena, Manuel Gabriel, Eng.c.	Mexico.	920 New York Avenue.
Rice, George Augustus, A.&S.	S. D.	1734 Penna. Avenue.
Richards, Alice Mary, T.C.	D. C.	311 Shepherd Street.
Richards, Henry Tilton, A.&S.	Mass.	The Lenox.
Riggles, Joseph Richard, A.&S.	D. C.	1328 Fairmont Street.
Risvold, Carl Sophus. A.&S.	Wis.	1132 10th Street.
Roberts, Iorwerth, A.&S.	D. C.	1731 13th Street.
Robeson, Edith Maxcy, A.&S.	D. C.	19th and Monroe Streets.
Robinson, Bessie, A.&S.	D. C.	3228 13th Street.
Rodgers, Bertha, T.C.	D. C.	1445 Massachusetts Ave.
Rogers, Frank Beecher, Eng.	N. Y.	1310 Girard Street.
Rogers, Mrs. Florence Hopkins, T.C.	D. C.	2013 14th Street.
Rohrer, Joseph R., C.P.S.	Ohio	1446 N Street.
Rollins, Helen Gertrude, T.C.	Mich.	122 15th Street, N. E.
Rose, Anna Loretto, A.&S.	D. C.	301 S Street, N. E.
Rose, Leonard Julian, Eng.c.	D. C.	3623 10th Street.
Rosen, Urban F., Eng. c.	D. C.	127 C Street, S. E.
Rosenthal, Maurice, C.P.S.	Mass.	414 P Street.
Ross, Raymond Lawrence, Eng.	Pa.	1418 Ames Place, N. E.
Roundy, Paul V., A.&S.	N. Y.	Geological Survey.
Rous, Ella Woolford, T.C.	La.	1906 Florida Avenue.
Rouzer, Horace Dodge, Eng.c.	Md.	Room 510, Mills Bldg.
Rover, Leo A., C.P.S.	D. C.	313 John Marshall Place.
Rowley, Clifford Alonzo, A.&S.	D. C.	1344 Kenyon Street.
Rumbough, John Baker, Eng.	N. C.	The Iowa, 13th & O Sts.
Russell, Paul G., A.&S.	D. C.	3538 Warder Street.
Safford, Howard Palmer, Eng.e.	D. C.	2445 Georgia Avenue.
Sale, Prentiss Dixon, Eng.c.	D. C.	225 8th Street, N. E.
Sanborn, George A., A.&S.	Wis.	Y. M. C. A.
Sanders, Elsie, T.C.	D. C.	1515 Park Road.
Schladt, George J., Eng.e.	D. C.	820 B Street, N. E.
Schmied, James William, A.&S.	Ohio	943 O Street.
Schmitt, Edwin Alexis, Eng.c.	D. C.	211 Florida Avenue.
Schmitt, Hugo Rudolph, Eng.e.	D. C.	211 Florida Avenue.
Schmitt, Waldo Lasalle, A.&S.	D. C.	211 Florida Avenue.
Schwartz, Herbert Henry, Eng.e.	D. C.	1412 G Street, S. E.
Scott, Joseph Addison Preston, Jr., Eng.c.	D. C.	902 Maryland Ave., N. E.

Name.	Legal residence.	City address.
Scott, Leila Fordham, A.&S.	D. C.	649 B Street, N. E.
Scott, Walter Clifford, A.&S.	D. C.	21 9th Street, N. E.
Seamon, Alexander Rives, A.&S.	Mexico	Alexandria, Va.
Seiler, Paul B., A.&S.	N. J.	Brookland, D. C.
Se Legue, Charles Albert, A.&S.	Ind.	1400 Chapin Street.
Shackelford, Laura, A.&S.	D. C.	924 Maryland Ave., N. E.
B.S., 1909, The George Washington University.		
Sheng, Lu Kung, C.P.S.	China	2001 19th Street.
Shepherd, Osborne, A.&S.	W. Va.	123 A Street, N. E.
Sherline, Herman Milton, Eng.c.	N. Y.	105 Rhode Island Ave.
Shuman, Royal Lewis, A.&S.	D. C.	1846 U Street.
Sikken, Janet Melvin, A.&S.	D. C.	129 T Street.
Simpson, Gustavus Sailer, A.&S.	D. C.	1477 Columbia Road.
Skinner, Arthur William, Eng.m.	Md.	Takoma Park, D. C.
Skinner, Frances Beckwith, A.&S.	D. C.	2525 Wisconsin Avenue.
Slarrow, Mrs. Mary Gordon, A.&S.	D. C.	1308 13th Street.
Slarrow, Malcolm Gordon, Eng.c.	D. C.	1308 13th Street.
Sloane, Charles Edward, Eng.c.	D. C.	1733 T Street.
Smallwood, Dorothy Archibald, A.&S.	D. C.	2107 S Street.
Smith, Conger Ryder, C.P.S.	D. C.	Y. M. C. A.
Smith, Duncan Campbell, A.&S.	Md.	Rockville, Md.
Smith, Janie Alice, A.&S.	D. C.	637 Mass. Ave., N. E.
Smith, James Rierson, A.&S.	N. C.	800 L Street.
Smith, Robert Hamilton, C.P.S.	D. C.	1746 Kalorama Road.
Smith, Rodney Marshall, Eng.c.	D. C.	619 12th Street, N. E.
Smith, Vincent Baker, Eng.c.	D. C.	3007 P Street.
Smith, Willis M., A.&S.	Mich.	726 13th Street.
Snead, Georgie T., A.&S.	Va.	1129 10th Street.
Snelling, Henry Hornor, Eng.m.	Va.	3522 10th Street.
Snow, Chaunsey D., T.C.	Mass.	2004 G Street.
A.B., 1910, Harvard University.		
Snyder, David Abner, C.P.S.	Pa.	23 Iowa Circle.
Soling, Abraham, Eng.	N. Y.	Bureau of Standards.
Somers, Harvey Leander, T.C.	Mass.	616 18th Street.
A.B., 1910, Harvard University.		
Stannard, Winfield Hancock, A.&S.	Mass.	1206 O Street.
Staves, Marion C., Eng.	Iowa	Coywood Apt. House.
Stearns, Stella Burger, T.C.	Minn.	National Park Seminary.
A.B., 1892, University of Minnesota.		
Steever, Laura Winfield, A.&S.	Md.	Forest Service.
Steger, Mary Evelyn, A.&S.	D. C.	1906 Florida Avenue.
Sterling, Frederick A., C.P.S.	D. C.	1718 H Street.

Name.	Legal residence.	City address.
Stern, Alfred G., C.P.S.	D. C.	1315 Columbia Road.
Stewart, Elmer, A.&S.	D. C.	812 Lamont Street.
Stilwell, Marie C., A.&S.	Mich.	423 Fourth Street.
Stockard, Marietta, T.C.	N. C.	1627 Lamont Street.
Stockton, Thomas Jefferson, Eng.e.	D. C.	1944 2d Street.
Stoll, Clara, T.C.	Austria	1302 Rhode Island Ave.
Stoulil, E. J., Eng.c.	N. D.	306 I Street.
Street, Blanche, T.C.	D. C.	1000 9th Street.
Sturtevant, Georgia Anna, A.&S.	Vt.	1221 K Street.
Stuwe, John Daniel, Eng.c.	Minn.	1017 P Street.
Summy, Helen, A.&S.	D. C.	920 19th Street.
Summy, Katherine Strong, A.&S.	D. C.	920 19th Street.
Summy, William Frank, A.&S.	D. C.	1623 R Street.
Swann, Theodore Magruder, A.&S.	Va.	Clarendon, Va.
Swartzell, John Naylor, Eng.m.	Md.	Chevy Chase, Md.
Taggart, Earl, A.&S.	D. C.	2124 Penna. Avenue.
Tauberschmidt, John A., A.&S.	D. C.	922 Westminster Street.
Taylor, Irving Paul, A.&S.	D. C.	1433 Belmont Street.
Taylor, James Norman, A.&S.	Del.	Bu. A. I., Dept. of Agr.
Taylor, Nellie Boyd, T.C.	D. C.	1000 N Street.
Taylor, Olivia Alexander, A.&S.	D. C.	The Exeter.
Thatcher, Arthur S., A.&S.	Pa.	Bureau of Chemistry.
Thies, William Herman, Eng.	Md.	W. N. Y. Drafting-room.
Thomas, Frank H., A.&S.	D. C.	18th and Park Road.
Thomas, Lisle, A.&S.	Mich.	1012 17th Street.
Thomas, William John Denziloe, C.P.S.	D. C.	1226 Irving Street, Brookland, D. C.
Thompson, Clarendon Haysmer, A.&S.	Mich.	1501 11th Street.
Thompson, Harry Woodward, Eng.m.	Iowa.	1340 Girard Street.
Thompson, John B., A.&S.	Ind.	1133 5th Street.
Thompson, Oscar, C.P.S.	Wis.	1443 Massachusetts Ave.
Thomson, Harriet Huntington, A.&S.	D. C.	3423 16th Street.
Thorne, Harold Carrier, Eng.e.	D. C.	5 Rhode Island Avenue.
Thorwarth, Julia Helen, A.&S.	Minn.	1320 Park Road.
Tiffany, Emma Ruth, T.C.	D. C.	3409 Brown Street.
Todd, Guillermo, T.C.	Venezuela.	1343 Monroe Street.
A.B., 1895, National College of Carraeas.		
Tomlin, Josephine Marie, A.&S.	D. C.	1011 B Street, N. E.
Toussaint, Henry J., Eng.c.	D. C.	304 Hibbs Building.
Townsend, Karl H., Eng.c.	Texas	1611 Lincoln Ave., N. E.

Name.	Legal residence.	City address.
Towson, Richard Mathew, Eng.	Va.	1309 22d Street.
Trigg, William Stark, Eng.e	Va.	Vienna, Va.
True, Elizabeth Fortune, T.C.	D. C.	1604 17th Street.
A.B., 1910, Goncher College.		
Trumbower, Eli C., A.&S.	Del.	1717 Lincoln Avenue.
Tucker, Prescott Stearns, A.&S.	D. C.	802 Mass. Ave., N. E.
Tunstall, Florence Marie, A.&S.	D. C.	1302 L Street.
Ulrickson, Hilda Louise, A.&S.	Vt.	617 21st Street.
Underwood, Harriet, T.C.	D. C.	2801 Q Street.
Urner, Nina, A.&S.	D. C.	40 C Street, N. E.
Vandegrift, John Leslie, Eng.m.	D. C.	1214 G Street, N. E.
Van Fossen, John Ray, A.&S.	Iowa	Arlington, Va.
A.B., 1904, Cornell College.		
Van Loock, Louis Anthonv, Eng.	D. C.	104 15th Street, N. E.
Van Riper, Emily, A.&S.	Ind.	1844 Columbia Road.
Van Schaick, John, Jr., T.C.	D. C.	1417 Massachusetts Ave.
A.B., 1894, Union College.		
Veihmeyer, Frank, Eng.c.	D. C.	1518 S Street.
Vernon, James Mercer, C.P.S.	Wash.	1519 20th Street.
Vinton, Benjamin, C.P.S.	D. C.	Stratford Hotel.
von Schrader, Irene, A.&S.	Mo.	1410 21st Street.
Wagner, Warren H., A.&S.	D. C.	642 G Street, N. E.
Waite, Stanley Sargent, C.P.S.	Okla.	Burlington Apartments.
Wakefield, Walter Harold, Eng.m.	D. C.	710 H Street.
Walker, Alberta, T.C.	D. C.	1634 S Street.
Walker, Bertha Florine, T.C.	D. C.	420 B Street, N. E.
Walsh, Helen Ivey, T.C.	D. C.	1372 Kenyon Street.
Walter, Wallace Wilson, A.&S.	D. C.	The Chalfonte.
Walters, Marion Irven, Eng.c.	D. C.	3228 Warder Street.
Walton, George Pelham, A.&S.	D. C.	Langdon, D. C.
Warner, Harold E., A.&S.	D. C.	1020 9th Street.
Watkins, Catherine Rose, T.C.	D. C.	1720 Oregon Avenue.
Watts, Mary Jane, T.C.	D. C.	1007 Irving Street.
Webb, James William, Eng.	D. C.	420 10th Street, S. E.
Welden, Wilbur Gerald, A.&S.	Mich.	38 T Street.
Weller, Ethel Marguerite, A.&S.	D. C.	753 8th Street, S. E.
Wharton, Roger Daniel, Eng.c.	D. C.	1657 Lamont Street.
Wheeler, Harold Leslie, A.&S.	Mass.	1824 California Street.
White, Mary Josephine, T.C.	Ohio	National Park Seminary.
Whitehead, Edmonia Powers, A.&S.	Va.	1521 28th Street.
Whitney, Clifford Caswell, A.&S.	D. C.	1128 B Street, N. E.
Whitney, Flora Goodridge, T.C.	D. C.	633 East Capitol Street.
Wiegand, Henry Frank, Eng.e.	D. C.	824 6th Street, S. W.

Name.	Legal residence.	City address.
Wiest, Edward, T.C.	Pa.	1443 Mass. Avenue.
Wild, Alfred E., Jr., Eng.m.	D. C.	12 10th Street, N. E.
Wilhelm, Robert Mason, A.&S.	Md.	1845 Calvert Street.
Willard, Nana B., A.&S.	D. C.	128 D Street.
Willey, Edward Steuart, A.&S.	Pa.	1241 I Street, N. E.
Williams, Edith Arvonia, A.&S.	D. C.	1602 New Jersey Ave.
Williams, G. Ellis, A.&S.	Md.	1111 M Street.
Williams, Griffith Holland, A.&S.	D. C.	1602 New Jersey Ave.
Wills, R. Mayo, Eng.	Va.	318 New York Avenue.
Willson, Charles Carter, Eng.	D. C.	57 R Street, N. E.
Wilson, Laurance Norton, A.&S.	Idaho	2331 1st Street.
Wing-yan, Ho., Eng.c	China	Chinese Legation.
Wingate, Henry Armstrong, A.&S.	N. Dak.	1215 Monroe Street.
Wong, Ung Cek, Eng.m.	China	1418 L Street.
Woodward, Esther Rittenhouse, T.C.	D. C.	125 New York Avenue.
Worster, Louise, A.&S.	D. C.	942 B Street, S. W.
Ying, Wu., Eng.c	China	48 M Street.
Yoder, Bertha Alice, T.C.	Kans.	144 11th Street, S. E.
Young, George William, C.P.S.	D. C.	1356 Irving Street.
Zalvidea, Juan A., Eng.	P. I.	115 S Street.
Zirkin, Maie, A.&S.	D. C.	821 14th Street.

Summary.

GRADUATE STUDENTS:

Students in attendance	8	
Candidates for D.C.L. degree	1	
Candidates for C.E. degree	2	
Candidates for E.E. degree	1	
Candidates for M.S. degree	7	
Candidates for M.A. degree	15	
Candidates for Ph.D. degree	21	
	55	
Duplicate	1	
		54

UNDERGRADUATE STUDENTS:

College of Arts and Sciences:

Candidates for A.B. degree	136	
Candidates for B.S. degree	4	
Candidates for B.S. in Chem. degree	33	
Special	106	
Auditors	2	
		281

College of Engineering and Mechanic Arts:

Candidates for B.S. in Arch. degree	3	
Candidates for B.S. in C.E. degree	74	
Candidates for B.S. in E.E. degree	31	
Candidates for B.S. in M.E. degree	29	
Special	39	
		176

College of the Political Sciences:

Candidates for A.B. degree	17	
Candidates for M.Dip. degree	8	
Special	50	
Auditors	2	
		77

Teachers College:

Candidates for A.B. degree and Teachers' Diploma	63	
Special	30	
		93
		681

PROFESSIONAL DEPARTMENTS.

DEPARTMENT OF LAW.

First Year.

Name.	Legal residence.	City address.
Alexander, William Morrison	D. C.	1711 Q Street.
Atherton, Ralph Edward. B.S., 1901, Worcester Polytechnic Institute.	D. C.	Patent Office.
Barr, John Lester. A.B., 1910, Harvard University.	D. C.	The Wyoming.
Berden, George Kennard	Mich.	519 4th Street.
Boughton, George William	D. C.	1424 K Street.
Bryant, Richmond	D. C.	The Northumberland.
Buck, George Burton	Md.	Census Office.
Burger, Alfred	Va.	Patent Office.
Button, Herbert Lucius	S. D.	Y. M. C. A.
Calley, Walter England. S.B., 1903, University of Chicago.	Pa.	1438 Meridian Place.
Campbell, Dudley A	Ohio	2036 F Street.
Cobb, Victor. B.S., 1908, Harvard University.	Va.	Patent Office.
Cohn, Mark Aurel	Pa.	421 6th Street.
Cook, Stanley Ward. M.E., 1910, Cornell University.	Mass.	Jenifer Building.
Coumbe, Edward Celestine	Wash.	1433 R. I. Ave.
Creekmore, Thomas Leonidas	Va.	1433 R. I. Ave.
Daniel, Robert Todd	D. C.	3000 Q Street.
Davis, Myron Mathews. S.B., 1909, Massachusetts Institute of Technology.	Me.	1860 Columbia Road.
Davis, Ray Osborne	Va.	507 Prince Street, Alexandria, Va.
De Baun, Claud	Ariz.	1132 8th Street.
Deibert, Arthur Hannum	D. C.	1411 Harvard Street.
Denning, William Ira	Ga.	4127 9th Street.
Des Jardins, Clarence Bigelow. B.A., 1909, Kalamazoo College.	Mich.	Coast & Geodetic Survey.
Diener, John Astor. B.S. in E.E., 1910, Purdue University.	Ind.	1626 S Street.
Donegan, John	D. C.	1912 Jackson St., N. E.
Dowdell, Thomas Joseph. B.S., 1903, Alabama Polytechnic Institute.	D. C.	233 3 Street, N. E.

Name.	Legal residence.	City address.
Dunham, Harry E.	N. Y.	1400 Chapin Street.
E.E., 1906, Syracuse University.		
Edinburg, Frank Peter	Kan.	2224 Shannon Pl., S. E.
A.B., 1903, Bethany College.		
A.M., 1905, University of Kansas.		
Ershler, Philip	N. Y.	314 East Capitol Street.
Fehr, John Ralph	Ill.	Patent Office.
Feldman, Peter Royal	Wis.	1378 Harvard Street.
Fiddler, Earle Thomas	Pa.	1730 Q Street.
Litt.B., 1909, Princeton University.		
Finley, David Edward, Jr.	S. C.	155 The Portner.
B.A., 1910, University of South Carolina.		
Fitzsimmons, Embert Lewis	Mass.	3463 14th Street.
Garlock, Edward Allen	Minn.	1214 V Street.
B.S. in E.E., 1908, Purdue University.		
Geiman, Daniel J.	Va.	1824 N. H. Avenue.
Gray, James William	N. Y.	33 B Street, N. W.
Grout, Ralph Cooper	Vt.	Census Office.
Hanna, Forest Walker	Mo.	1811 G Street.
B.A., 1909, Northwestern University.		
Harden, Fred Geer	Nebr.	231 B Street, N. E.
A.B., 1907, A.M., 1908, University of Nebraska.		
Harding, Harvey Almon	Nebr.	1739 Park Road.
Hare, Butler Black	S. C.	715 19th Street.
A.B., 1899, Newberry College.		
M.A., 1910, The George Washington University.		
Hare, Henry Benjamin	S. C.	715 19th Street.
A.B., 1909, Newberry College.		
Hawley, Luther W.	Vt.	Patent Office.
B.S., 1908, Worcester Polytechnic Institute.		
Heitmuller, George Roeder	D. C.	1307 14th Street.
Henderson, Robert	D. C.	1601 23d Street.
Graduate, 1902, United States Naval Academy.		
Hendry, Morgan Leland	Md.	406 Evans Building.
Hinton, Sebastian	D. C.	222 A Street, S. E.
A.B., 1909, Princeton University.		
Hubbard, Elliott S.	N. Y.	Gov't Printing Office.
Isom, James Rudolph	Ark.	1004 11th Street.
Jackson, Edwin Roy	Iowa.	Forest Service.
B.S., 1904, State University of Iowa.		
Jeffrey, Frank Rumer	Wash.	1433 R. I. Avenue.
Johnson, Robert	Mo.	1304 Belmont Street.
Kennedy, George Henry, Jr.	D. C.	Patent Office.
B.S. in M.E., 1910, University of Pennsylvania.		

Name.	Legal residence.	City address.
Kinyoun, Joseph Perry	D. C.	1423 Harvard Street.
Kirley, Grover Cleveland	Mass.	1623 Park Road.
A.B., 1909, Amherst College.		
Knowlton, Morris Willson	Me.	507 Quincy Street.
Koester, Karl	D. C.	2110 1st Street.
Landers, Maurice Birdsall	N. Y.	1436 Meridian Place.
A.B., 1903, Hamilton College.		
S.B., 1905, Massachusetts Institute of Technology.		
Langley, Jesse Raymond	Okla.	1312 Fairmont Street.
B.S., 1908, University of Michigan.		
Larson, William Ludwig	S. D.	1700 15th Street.
Levinson, Harry De Witte	Mich.	1316 L Street.
Libby, Warren Edgar	Me.	1303 P Street.
A.B., 1909, Bates College.		
Lillie, Ray Dudley	Mich.	1429 N. Y. Avenue.
A.B., 1904, University of Michigan.		
Lipschutz, David	N. Y.	1132 7th Street.
Mapes, Carl Anthony	Mich.	4 8th Street, S. E.
Moore, Maurice Malcolm	Mich.	1869 Columbia Road.
Morrison, William Lester	Mass.	1324 Mass. Avenue.
Moses, William Henderson	D. C.	2129 Wyoming Avenue.
Newhouser, Roy Lyman Joseph	D. C.	1707 21st Street.
B.A., 1909, The George Washington University.		
Niller, William	N. C.	1476 Clifton Street.
Nooe, Bennet, 3d	N. C.	1501 Park Road.
O'Brien, Francis Vincent	N. Y.	145 U Street.
Otto, Arnold Clarence	Wis.	1012 15th Street.
Owens, Thomas Robert	Ala.	Y. M. C. A.
Paine, John Gregg	Pa.	118 Adams Street.
A.B., 1909, Wesleyan University.		
Parke, John Thomas	W. Va.	R. M. S., Union Station.
Peterson, Ernest A.	Minn.	1209 K Street.
B.A., 1910, University of Minnesota.		
Philips, Charles K	Pa.	1828 13th Street.
A.B., 1909, Princeton University.		
Plant, Perley Hollis	Me.	The Alabama.
A.B., 1904, Bates College.		
Platt, Roger Burchard	N. Y.	814 8th Street.
A.B., 1908, Cornell University.		
Poppy, Edward	Austria	1412 Mass. Avenue.
Preston, Neil De Forest	N. Y.	1824 California Street.
M.E., 1908, Cornell University.		
Rodgers, Robert Elmer	Texas	316 C Street.

Name.	Legal residence.	City address.
Rose, Claude Custer	Ohio	115 R Street, N. E.
M.E., 1905, Ohio State University.		
Samsel, Albert Charles	Tenn.	417 2d Street.
B.A., 1910, Maryville College.		
Savage, Henry J	Mich.	1314 Park Road.
B.S. in E.E., 1908, University of Michigan.		
Schantz, Leroy Christian	Iowa	1702 F Street.
B.S. in E.E., 1908, Iowa State College.		
Scott, James Bancroft	N. J.	1730 Q Street.
B.A., 1909, Rutgers College.		
Shea, John Michael	Conn.	225 B Street.
Shelton, Theodore D.	N. C.	474 Penna. Avenue.
Sheppard, Ronald Willmot	N. J.	1839 Monroe Street.
Smith, Frank Brown	Md.	Bowie, Md.
Smith, Frank Seymour	D. C.	1631 16th Street.
B.A., 1910, Wesleyan University.		
Stone, James Austin	D. C.	1618 R. I. Avenue.
B.A., 1910, Swarthmore College.		
Straw, Charles Alonzo, Jr.	Mass.	3014 Dent Place.
A.B., 1901, Harvard University.		
Strong, William, Jr.	D. C.	1208 18th Street.
Stuart, Henry Clifford	D. C.	1728 Conn. Avenue.
Stuart, Ralph Richard	Iowa	332 Md. Avenue, N. E.
Terney, Ewald William	D. C.	336 Adams Street, N. E.
Thomson, Julius Faison	N. C.	1100 Vermont Avenue.
A.B., 1909, University of North Carolina.		
Tolbert, James Ora	Iowa	210 Y. M. C. A.
Tonne, Franklin Deitrich	Minn.	1221 O Street.
Walker, Clarence Stevens	Mass.	1200 East Capitol Street.
A.B., 1904, Harvard University.		
Waters, Joseph Henry	D. C.	3227 11th Street.
B.S. in E.E., 1910, The George Washington University.		
Wenderoth, Ernest Ferdinand	N. Y.	Patent Office.
B.S. in E.E., 1910, The George Washington University.		
White, Hubert Shadrach	Va.	1128 6th Street.
Wilson, Irving Thomas	Md.	Nat'l Sav. & Trust Co.
Woodman, William Hidden	N. J.	1933 Calvert Street.
B.S., 1908, Dartmouth College.		
Young, Earl	Minn.	1737 F Street.
Young, George William	D. C.	1356 Irving Street.
Zacharias, Robert Mathias	Pa.	1717 S Street.
A.B., 1907, Franklin and Marshall College.		

Second Year.

Name.	Legal residence.	City address.
Applebaum, Aaron Eleazar	N. J.	1232 14th Street.
Appling, Richard Norton	Mo.	31 B Street, N. W.
Baldwin, Asa Columbus A.B., 1908, Western Reserve University.	Ohio	135 A Street, N. E.
Barber, Azro Lucien A.B., 1907, Syracuse University.	N. Y.	1433 R. I. Avenue.
Bickel, Harvey Cleveland	Pa.	1318 12th Street.
Bond, Eugene Webster	Ill.	902 F Street.
Briscoe, Lawrence Morton	Md.	1213 Conn. Avenue.
Brookes, John St. Clair, Jr. B.A., 1907, M.A., 1910, The George Washington University.	D. C.	1525 Corcoran Street.
Burson, Edgar Ferrall	Kans.	1334 B Street, S. E.
Coulson, Robert Earl A.B., 1909, Cornell University.	N. Y.	1422 Belmont Street.
Cox, John Dee	Texas	4300 Kansas Ave.
Davis, Max Warburton M.E., 1908, Cornell University.	Conn.	1717 S Street, N. W.
Davis, William Edward A.B., 1907, Western Maryland College.	Md.	506 Evans Building.
Denman, Charles Arthur	Neb.	604 C Street, N. E.
De Wolf, Richard Crosby	Mass.	Library of Congress.
Du Bois, Henry Pastor M.E., 1907, Cornell University.	Pa.	1421 Chapin Street.
Dulles, John Foster A.B., 1908, Princeton University.	N. Y.	1323 18th Street.
Dunlop, Walter Grafton B.S., 1909, Princeton University.	D. C.	The Cordova.
Eickhoff, Theodore Henry B.S. in E.E., 1908, Purdue University.	Ind.	1522 16th Street.
Foote, Morris Cooper	D. C.	16 5th Street, S. E.
Galleher, Parke Ashby	D. C.	116 3d Street, N. E.
Gamble, Ralph Abernethy Litt.B., 1909, Princeton University.	S. D.	The Portland.
Gerard, Charles Wesley A.B., 1906, Ohio State University.	D. C.	2212 Flagler Place.
Glover, Charles Carroll, Jr. B.A., 1910, Yale University.	D. C.	1703 K Street.
Gordon, Spencer A.B., 1909, Princeton University.	D. C.	3028 Q Street.
Guptill, Leon Clifton B.A., 1909, Colby College.	Me.	23 1st Street, N. E.

Name.	Legal residence.	City address.
Hawley, Charles Taft	Mass.	6914 5th Street, Takoma Park, D. C.
B.S., 1898, M.E., 1908, Worcester Polytechnic Institute.		
Helms, Birch	Pa.	618 Colorado Building.
A.B., 1909, Yale University.		
Herman, Morris D.	Minn.	1115 6th Street, N. W.
Hoover, Joseph Raymond	D. C.	1118 9th Street.
Houston, William Cannon, Jr.	Tenn.	302 H. R. Office Bldg.
Hudson, Douglas Granville	Kans.	1843 Vernon Street.
Humason, Harris Monroe	Conn.	1445 Mass. Avenue.
A.B., 1909, Yale University.		
Hunter, Orren Franklin	S. C.	1537 Monroe Street.
B.S., 1894, South Carolina Military Academy.		
Jensen, Earl Ephraim	Utah	431 Mass. Avenue.
Kause, Arthur John	D. C.	1905 Jackson St., N. E.
Klise, Bernard Shippey	Mich.	1933 Calvert Street.
Kunkel, Frederick Eugene	Pa.	1717 S Street.
Lamb, William Ers	D. C.	1322 I Street.
B.S., 1909, Dartmouth College.		
Lazarus, I. Burt	Mass.	621 19th Street.
Lindeman, Clarence Albert	Cal.	1226 11th Street.
Macfarland, Horace Greely	D. C.	1727 F Street.
Graduate, 1891, United States Naval Academy.		
McKibbin, George Baldwin	Iowa	113 H. R. Office Bldg.
A.B., 1909, Iowa Wesleyan College.		
Manning George Madison Adams	Ky.	1101 14th Street.
Miller, Lawrence Arnold Gale	Mass.	Patent Office.
A.B., 1908, Harvard University.		
Moakley, Harry Joseph	Conn.	1860 Columbia Road.
Ph.B., 1908, Yale University.		
Momsen, Richard Paul	Wis.	371 H. R. Office Bldg.
Moore, Josiah Arthur	Ill.	1100 Vt. Avenue, N. W.
B.S., 1907, The James Milliken University.		
Moore, James Ballard	D. C.	1869 Columbia Road.
Moore, Rawles	Ky.	Treasury Department.
Munden, Ralph	Pa.	Patent Office.
M.E., 1906, Cornell University.		
Nairn, William Wallace, Jr.	D. C.	901 Lawrence St., N. E.
Nixon, Cleon Robert	Ill.	209 A Street, S. E.
B.S., 1909, Shurtleff College.		
Ogilby, Charles Fitz Randolph, Jr.	D. C.	1416 F Street.
Oren, James Paul	Pa.	Y. M. C. A.
Packard, Roscoe Milliken	D. C.	Patent Office.
A.B., 1899, M.A., 1900, Western Reserve University.		

Name.	Legal residence.	City address.
Peck, George Curtis Stanley	D. C.	Ways and Means Committee, H. R.
Richardson, Madison. B.A., 1909, Wofford College.	S. C.	514 East Capitol Street.
Rush, Clifford Alvin	Kans.	Y. M. C. A.
Scanlon, Tom	S. D.	1700 15th Street.
Scheffer, Joseph Walter	Conn.	2124 Penna. Avenue.
Schnare, Lester Llewellyn	Ga.	Y. M. C. A.
Schreiber, Ernst Otto, Jr. B.A., 1910, The George Washington University.	D. C.	642 E Street, N. E.
Shaw, Paul James	Pa.	1826 G Street.
Sheppard, Carl Dunkle. Ph.B., 1902, Ohio University.	Ohio	Florence Court.
Smith, Charles Watson	Pa.	1115 9th Street.
Smith, St. Clair	S. D.	1700 15th Street.
Spessard, Walter Valentine. B.A., 1909, Lebanon Valley College.	Pa.	457 M Street.
Stinchfield, Ray Lewis. B.S., Worcester Polytechnic Institute.	Mass.	Patent Office.
Stubblefield, Simon Peter	Miss.	1400 Chapin Street.
Sutton, Loyd Hall. S.B., 1908, Massachusetts Institute of Technology.	Mass.	The Majestic, Euclid St.
Townsend, Wilson Lewis	Md.	Kensington, Md.
Watkins, Elton. A.B., 1910, Washington and Lee University.	D. C.	1008 10th Street.
White, Richard Franklin. A.B., 1910, The Tulane University of Louisiana.	La.	67 The Brunswick.
Zeh, Henry William	D. C.	1357 Harvard Street.

Third Year.

Andersen, Charles	Texas	216 North Capitol Street.
Baer, David Alphonse. B.A., 1910, The George Washington University.	D. C.	1860 Columbia Road.
Baldwin, Edward Damon. B.Lit., 1906, Whitman College. M.A., 1909, The George Washington University.	Ore.	204 H. R. Office Bldg.
Beneman, George	Md.	1336 7th Street.
Berry, James William. B.A., 1909, The George Washington University.	D. C.	14 3d Street, S. E.
Bullion, Clarence Leroy	Ohio	1328 8th Street.
Burns, Walter William. M.E., 1906, Cornell University.	N. Y.	518 Shepherd Street.

Name.	Legal residence.	City address.
Butler, Comfort Straight	Ill.	The Cumberland.
A.B., 1909, University of Illinois.		
Byrn, Edward Wright, Jr	Md.	Silver Spring, Md.
Callister, Edward Richard	Utah	215 Senate Office Bldg.
Carpenter, John Condict	D. C.	1318 Vermont Avenue.
M.E., 1908, Cornell University.		
Cox, Henry Aubrey	Tenn.	1433 R. I. Avenue.
Curl, Joseph Ryland	D. C.	New Masonic Temple.
B.S., 1909, The George Washington University.		
Disque, William Alfred	Ky.	Y. M. C. A.
Dodge, Parker Van Patten	D. C.	134 B Street, N. E.
S.B., 1907, Massachusetts Institute of Technology.		
Dutton, Clarence Benjamin	Mass.	1209 Emerson Street.
Faison, Paul Fletcher	N. C.	1915 H Street.
Farmer, Matthew Singleton, Jr	N. C.	154 A Street, N. E.
Fenwick, Frank Knox	Mo.	1443 Mass. Avenue.
Fischer, Stanley Herman	D. C.	1724 Lanier Place.
Foo, Hsen Shuen	China	Chinese Legation.
A.B., 1906, The Ching Chong School.		
Fraser, William Wright	Md.	Patent Office.
A.B., 1905, New Windsor College.		
Gerhart, Herbert Benjamin	Pa.	918 23d Street.
Gill, Walter Josiah, Jr	Mass.	Patent Office.
S.B., 1904, Massachusetts Institute of Technology.		
Goode, Philip Burwell	D. C.	Patent Office.
A.B., 1907, Harvard University.		
Gray, Jay Lyman	Me.	320 Md. Avenue, N. E.
A.B., 1908, Bowdoin College.		
Herriott, David Paul	Pa.	1700 15th Street.
A.B., 1905, Washington and Jefferson College.		
Hilton, Charles Vanderbilt	Md.	3264 N Street.
Hoover, Frank Willard	D. C.	1824 16th Street.
Hynson, Richard Washburn	D. C.	1335 N Street.
Kemper, Edward Crawford	Va.	1933 Calvert Street.
Koeppler, John Louis	Wis.	Takoma Park, D. C.
Lilly, Scott Henry	Iowa	4122 7th Street.
B.A., 1897, Cornell College.		
Linnell, William Shepherd	Me.	320 Md. Avenue, N. E.
A.B., 1907, Bowdoin College.		
Long, Franklin Samuel	Ill.	2206 Flagler Place.
Mathews, Roy Lee	Minn.	1700 15th Street.
Mechlin, Ernest Frederick	D. C.	Patent Office.
B.S., 1907, The George Washington University.		

Name.	Legal residence.	City address.
Miller, Herman	Neb.	Patent Office.
B.S., 1898, Nebraska Wesleyan University.		
Moyer, Samuel	Pa.	323 W Street, N. E.
Myers, John Dashiell	D. C.	1634 Riggs Place.
Neal, Franklin Gilman	Mass.	3141 Mt. Pleasant St.
Ph.B., 1908, Yale University.		
Nettleton, Leigh Lanman	Utah	918 23d Street.
Nicholson, Soterios	Greece	1801 G Street.
Oberlin, John Jay	Md.	Patent Office.
A.B., 1901, Washington and Lee University.		
Owen, Richard Blakelock	D. C.	Warder Building.
Palais, Maurice	Mass.	111 Md. Avenue, N. E.
Pease, Ferdinand Henry	Vt.	1424 K Street.
B.A., 1907, University of Vermont.		
Place, Ernest Frederic	N. Y.	H. R. Office Building.
Rowland, Guy Edwin	Texas	Chevy Chase, Md.
Seiler, Justin Frank	Ohio	American Univ. Park.
B.A., 1908, M.A., 1910, The George Washington University.		
Smith, Jesse Bond	D. C.	101 Chestnut Street, Takoma Park, D. C.
Spencer, Thomas Peachy	Va.	1408 M Street.
A.B., 1905, William and Mary College.		
Tilton, Rufus Harold	Mass.	220 2d Street, N. E.
Ph.B., 1908, Wesleyan University.		
Walker, John Earl	Mich.	1012 15th Street.
B.S., 1907, Kalamazoo College.		
B.S., 1907, University of Chicago.		
Wann, Eugene Charles	D. C.	144 F Street, S. E.
Warden, Franklin Milton	Ill.	Care Sergeant-at-Arms, House of Rep.
Webber, Lane Davis	Ind.	905 13th Street.
Wyatt, Hardee	N. M.	1225 F Street.
B.S., 1897, National Normal University.		
L.I., 1900, University of Nashville.		
B.A., 1901, Southern Normal University.		
Zirkle, Joseph Claiborne	Va.	635 F Street.

Fourth Year.

Babcock, Richard Earle	D. C.	707 G Street.
Blount, Walter Eames	D. C.	3101 R Street.
Bradley, Paul Earl	Ill.	Y. M. C. A.
Calvert, John Wentworth	Md.	1750 Corcoran Street.
Cohen, A. Lapin	Wis.	1322 Vermont Avenue.

Name.	Legal residence.	City address.
Dahn, Franz Frederick William...	Minn.....	1433 R. I. Avenue.
B.S., 1909, The George Washington University.		
Dodson, James Dunbar.....	D. C.....	1714 F Street.
Everett, Frank Orear.....	Mo.....	922 14th Street.
B.A., 1909, The George Washington University.		
Faulkner, William Ernest.....	Ky.....	7 S Street.
B.A., 1907, Union College.		
Garrett, George Everett.....	Va.....	Patent Office.
Grover, William Robinson.....	Mich.....	1012 15th Street.
Ph.B., 1907, Kalamazoo College.		
Hellen, Arthur.....	D. C.....	1731 20th Street.
Hill, Hermon Henry.....	Mass.....	143 R. I. Avenue.
A.B., 1907, Dartmouth College.		
Le Duc, Louis Bronson.....	D. C.....	1403 21st Street.
Mackenzie, Robert Lundie.....	Ore.....	807 11th Street.
McCray, Claud Henry.....	N. Y.....	930 18th Street.
B.S., 1907, Hobart College.		
Paddock, William Waterman.....	Iowa.....	205 The Sherman.
Patterson, Matthew Waren.....	Ark.....	Dept. of Agriculture.
Pillow, Gideon Johnston.....	La.....	1464 Clifton Street.
Smith, Conger Ryder.....	Mich.....	Y. M. C. A.
Smith, Thomas William.....	Idaho.....	Y. M. C. A.
Swan, Arthur Rogers.....	Va.....	Clarendon, Va.
Thompson, Oscar.....	Wis.....	1227 15th Street.
Van Vleck, William Cabell.....	D. C.....	719 Quincy Street.
B.A., 1908, The George Washington University.		
White, Herbert William.....	Iowa.....	1700 15th Street.
Ph.B., 1907, Simpson College.		
Wilmeth, Warner Lambeth.....	Texas.....	14 Grant Place.

Master of Laws.

Barrick, Henry Llewellyn.....	Neb.....	1236 11th Street.
LL.B., 1910, The George Washington University.		
Black, Charles Frederick.....	Vt.....	The Cumberland.
Ph.B., 1907, University of Vermont.		
LL.B., 1910, The George Washington University.		
Hampton, Wade Bruce.....	N. C.....	3625 Lowell Street.
B.A., 1909, M.A., 1910, LL.B., 1910, Wake Forest College.		
Harding, Lee Robert.....	Iowa.....	305 M Street.
LL.B., 1907, The George Washington University.		
Miller, Albert Elias.....	Mich.....	1103 6th Street.
LL.B., 1905, State University of Iowa.		

Name.	Legal residence.	City address.

Patterson, Charles Herman.....N. Y.....1732 16th Street.
Graduate, 1903, United States Military Academy.
LL.B., 1909, New York Law School.

Stevenson, John McAllister, Jr....Texas.....The Benedict.
A.B., 1903, Yale University.
LL.B., 1910, University of Texas.

Master of Patent Law.

Adams, Edgar Whittington.....Ill.....1126 Columbia Road.
B.S. in E.E., 1908, Armour Institute of Technology.
LL.B., 1910, National University Law School.

Adams, Ira James.....Kans.....622 Irving Street.
B.S., 1906, University of Kansas.
LL.B., 1910, National University Law School.

Aveilhé, Lilian Brock.....D. C.....900 F Street.
LL.B., 1905, Washington College of Law.

Babcock, Richard Earle.....D. C.....707 G Street.

Bean, George Tinny.....D. C.....Patent Office.
LL.B., 1910, National University Law School.

Boyle, John, Jr.....Mass.....1369 East Capitol Street.
S.B., 1901, Massachusetts Institute of Technology.

Brannigan, Robert Alan.....D. C.....1748 M Street.

Braselton, Chester Harmon.....Ill.....Patent Office.
B.S., 1904, Valparaiso University.

Campbell, Jesse Miller.....Mo.....Patent Office.
D.D.S., 1888, National University.
LL.B., 1910, Washington College of Law.

Church, Melville Durant.....D. C.....1608 20th Street.

Cohen, Nathan.....Minn.....617 K Street.
E.E., 1906, University of Minnesota.
LL.B., 1910, Georgetown University.

Draper, Anne Elizabeth.....N. Y.....1330 Vermont Avenue.
LL.B., 1908, Washington College of Law.

Evans, Elizabeth Tyler.....D. C.....1503 Q Street.
LL.B., 1908, Washington College of Law.

Fravel, F. Russell.....Mass.....1016 15th Street.
LL.B., 1908, The George Washington University.

Gammons, Herman Trafton.....D. C.....414 Shepherd Street.
S.B., 1906, Massachusetts Institute of Technology.
LL.B., 1908, LL.M., 1909, National University Law School.

Gourley, George F.....Md.....3542 11th Street.
LL.B., 1909, LL.M., 1910, National University Law School.

Harris, Joseph.....Mass.....Patent Office.
LL.B., 1910, Washington College of Law.

Name.	Legal residence.	City address.
Hellman, Carl A.	Ill.	Patent Office.
B.S., 1906, M.S., 1909, University of Illinois. LL.B., 1910, National University Law School.		
Kent, Sophie Bishop	R. I.	834 13th Street.
LL.B., 1907, LL.M., 1908, Washington College of Law.		
Kimmel, George Peter	Kans.	705 Mt. Vernon Place.
LL.B., 1910, Georgetown University.		
Kingsbury, Harold Avery	D. C.	Patent Office.
LL.B., 1910, National University Law School.		
May, Edgar Hale	D. C.	17 Quarry Road.
LL.B., 1895, LL.M., 1896, Columbian University.		
Porter, Floyd John	N. Y.	Y. M. C. A.
LL.B., 1909, LL.M., 1910, National University Law School.		
Sargent, Lester Lyman	Mass.	718 12th Street.
LL.B., 1910, Georgetown University.		
Stevenson, John McAllister, Jr.	Texas	The Benedict.
A.B., 1903, Yale University. LL.B., 1910, University of Texas.		
White, Frederick Howard	Minn.	1130 12th Street.
LL.B., 1909, Washington College of Law.		
Williams, La Mont Abner	D. C.	The Cadiz.
LL.B., 1901, State University of Iowa.		

Special, Patent Law.

Burgess, Newton Albert	Ala.	3113 11th Street.
B.S. in E.E., Alabama Polytechnic Institute.		
Dahn, Franz Frederick William	Minn.	1433 R. I. Avenue.
B.S., 1909, The George Washington University.		
Garrett, George Everett	Va.	Patent Office.
Low, Theodore Henry	Conn.	1909 N Street.
Quirollo, Lawrence Henry	D. C.	2031 P Street.
Stinchfield, Ray Lewis	Mass.	Patent Office.
B.S., Worcester Polytechnic Institute.		

Special.

Baldwin, Elmer Ira	D. C.	617 C Street, S. E.
LL.B., 1897, Northern Illinois College of Law.		
Behrmann, Carl Martin	Ill.	Y. M. C. A.
Buckingham, Richard Thomas	D. C.	1525 29th Street.
Corey, Ernest Maynard	N. Y.	Y. M. C. A.
Culbertson, William Smith	Kans.	2957 Newark Street.
A.B., 1907, College of Emporia. A.B., 1908, Yale University.		

Name.	Legal residence.	City address.
Dow, William John	Mo.	2020 N. Capitol Street.
Farmer, James Price	D. C.	154 A Street, N. E.
Forbes, Harvey Dwight	N. Y.	2955 Tilden Street.
Grinager, Lars Jacob	S. D.	1734 Penna. Avenue.
Handy, Elias Hurst	D. C.	643 Mass. Avenue, N. E.
Jensen, William Critchlow	Utah	431 Mass. Avenue.
Kemmerer, Charles Tilghman	Iowa	1115 8th Street.
Ph.B., 1903, State University of Iowa. LL.B., 1905, University of Michigan.		
Kimmel, George Peter	Kans.	705 Mt. Vernon Place.
LL.B., 1910, Georgetown University.		
Lerch, John George	D. C.	1520 M Street.
McBlair, Robert	Va.	912 Munsey Building.
Murdock, George Norman	Ore.	1103 6th Street.
LL.B., 1910, Willamette College of Law.		
Offutt, Hilleary Lyles, Jr.	Md.	Kensington, Md.
Rust, Breckinridge Cabell	D. C.	McGill Building.
Saum, Hugh Harris	D. C.	207 Florence Court.
Scott, Foster Clyde	Ill.	4 8th Street, S. E.
Se Legue, Charles Albert	Ind.	1400 Chapin Street.
LL.B., 1909, Georgetown University.		
Shawn, Franklin Denwood	Pa.	1419 Chapin Street.
Sinclair, Beverly Kennon	Va.	Care W. B. Hibbs & Co.
Smith, George Walter	Pa.	Y. M. C. A.
Spencer, William Boyd	Pa.	1103 6th Street.
Stottle, Burr Shearer	Mo.	1024 17th Street.
Watson, Paul Herbert	Kans.	1322 Kearney St., Brookland, D. C.
Willis, George Bullock	Va.	R. F. D. No. 3, Alexandria, Va.
Wilmer, Joseph Allison	Md.	3117 N Street.
Winkelhaus, William August	Ill.	4226 8th Street.

Review.

Gallagher, Laurence Joseph	N. Y.	Patent Office.
B.E., 1903, Union College. LL.B., 1909, Georgetown University. M.P.L., 1910, The George Washington University.		
Holmes, Rexford Louis	Mo.	1114 D Street, N. E.
LL.B., 1908, LL.M., 1910, The George Washington University.		
James, Charles Grant	Ohio	1449 Fairmont Street.
LL.B., 1905, The George Washington University.		

Name.	Legal residence.	City address.
Moore, Noble	D. C.	Treasury Department.
LL.B., 1896, LL.M., 1897, Columbian University.		
Sanders, Franklin Oliver	Pa.	1354 Otis Place.
LL.B., 1906, LL.M., 1907, The George Washington University.		
Sunderlin, Louis Kossuth	Iowa	941 M Street.
LL.B., 1908, The George Washington University.		
Waterman, Jason	Mich.	1807 3d Street, N. E.
LL.B., 1903, Columbian University.		

Summary.

CANDIDATES FOR LL.B. DEGREE:	
First year	112
Second year	75
Third year	59
Fourth year	26
CANDIDATES FOR LL.M. DEGREE	7
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DEPARTMENT OF MEDICINE.

Doctor of Medicine.

First Year.

Name.	Legal residence.	City address.
Baldus, Aloysius A.	D. C.	1236 Quincy Street, Brookland, D. C.
Barger, Gervase J. P.	D. C.	1335 Mass. Ave., S. E.
Beals, Frank Lee	D. C.	Kenesaw Apts.
Bloom, Rudolph	Va.	308 7th Street, S. W.
Bolton, Boyce Richardson	D. C.	3104 P Street.
Bush, Andrew Pleasant	W. Va.	1325 H Street.
Clar, Benjamin	Russia	914 P Street.
Fellers, Ray Leopold	Mich.	1000 M Street.

Name.	Legal residence.	City address.
Field, Fay	Pa	128 C Street, S. E.
Harrison, Forrest Martin	Va	1215 K Street
Jova, Andres Martin	Cuba	512 10th Street.
Lowenstam, Sigmund	N. H.	602 Mass. Ave.
McArdle, J. Ford Thompson	D. C.	1826 Columbia Road.
Miller, Thomas, Jr	D. C.	1616 7th Street.
Newbold, Thomas P.	D. C.	302 11th Street, S. W.
Passer, William Frederick Ph.c., 1904, University of Minnesota.	Minn.	918 23d Street.
Payne, John Welford	D. C.	R. F. D. No. 5, Congress Heights, D.C.
Peters, David B. Phar.D., 1910, The George Washington University.	Va.	Govt. Hosp. for Insane.
Petrolias, George A.	Greece	601 Louisiana Ave.
Porter, Charles Wallace	Ohio	806 10th Street.
Schurgot, James Adair	Pa.	1340 New York Ave.
Supplee, Eugene Deyerle	Va.	311 A Street, N. E.
Sze, Tsannyoen Philip	China	38th & Joselyn Streets.
Taylor, Chase	D. C.	1433 Belmont Street.
Walton, Robert Ralph	Wash.	918 23d Street.

Second Year.

Abaza, Sulieman Hussain	Egypt	1426 9th Street.
Boyd, Francis Marion	Kans.	1325 H Street.
Cohen, Ralph	D. C.	618 D Street.
Dembrosky, William Louis	Russia	708 H Street, N. E.
Dougherty, Bernard Joseph	Minn.	1335 H Street.
English, Leonard Harrison	Pa.	128 C Street, S. E.
English, Merton Alden	Pa.	1758 Park Road.
Fortier, Roy McLeay	Cal.	2310 19th Street.
Henneberger, Josiah Baker	Md.	607 M Street.
Riley, Albert Austin	Ohio	1375 Columbia Road.
Shea, George Marvin Waite	Conn.	1502 P Street.
Stallings, Clara Laing	Md.	1317 13th Street.
Stout, Joseph Duerson A.B., 1910, The George Washington University.	D. C.	1426 9th Street.
Travis, John Randolph	Va.	1319 Vermont Ave.

Third Year.

Bailey, William Otis	S. C.	1217 N Street.
Borden, Daniel LeRoy	D. C.	1801 California Street.
Bricker, Sacks	D. C.	200 15th Street, S. E.
Calver, George Wehnes	D. C.	207 A Street, S. E.

Name.	Legal residence.	City address.
Castell, Louis Bernard	D. C.	1132 6th Street.
Corbett, Sewall Munson	Va.	1700 15th Street.
Cram, Albert Monroe	Vt.	1611 13th Street.
Eckhardt, John Carl	D. C.	1140 18th Street.
Fitz-Hugh, William DeHardt	Va.	Sibley Hospital.
Gray, Augustus Clagett	Md.	1335 H Street.
Hall, Custis Lee	D. C.	1408 Chapin Street.
Hunter, Oscar Benwood	Va.	1305 22d Street.
Kane, Howard Francis A.B., 1909, Bowdoin College.	Me.	1229 15th Street.
Knott, Charles O	Va.	1006 I Street, S. E.
LaGrade, Louis Anatole, Jr.	D. C.	2624 Woodley Place.
Landis, Charles Caldwell	Cal.	1611 13th Street.
Luckett, George Sparr A.B., 1907, Wooster University.	Va.	1340 New York Ave.
Milbourn, Frank Washington	Va.	Garfield Memorial Hosp.
Mooers, Harold Alonzo	D. C.	Takoma Park, D. C.
Pagan, Albert Elwood	D. C.	1965 Biltmore Street.
Read, Boyd Richard	D. C.	1819 N. Capitol Street.
Rollings, John Adolph	W. Va.	1143 22d Street.
Scarito, Nicholas Julius	D. C.	1200 S Street.
Schaub, Gustavus Adolphus	Tex.	1229 15th Street.
Sloat, Jesse Irving	D. C.	23 1st Street, N. E.

Fourth Year, Five-Year Course.

Brewer, Gilbert Roscoe	Ill.	2439 N Street.
Burnett, Roy Edgar	Okla.	1307 R Street.
Dyer, John Christopher	Ohio	1225 B Street, N. E.
Ellison, Everett Monroe A.B., 1901, A.M., 1903, Grant University.	Tenn.	Y. M. C. A.
Fisher, Charles A	Pa.	1307 R Street.
Hunt, Isaac Burton	Tenn.	1223 12th Street.
Leonard, George Ferree A.B., 1907, University of North Carolina.	N. C.	1220 N Street.
Martin, Aaron Wise	Va.	1833 K Street.
Pitt, Richard V	Va.	Mt. Vernon Apts.
Ralph, Charles Edward	Ill.	406 11th Street, N. E.
Read, Effie Alberta Ph.D., 1907, Cornell University.	Mass.	Apt. 66, The Brunswick.

Fourth Year.

Arneson, Arne O	Minn.	929 H Street.
Baum, Ewald George	Wis.	Children's Hospital.

Name.	Legal residence.	City address.
Brock, Charles LeRoy	D. C.	1335 H Street.
Castleman, Philip	Mass.	1232 14th Street.
B.S., 1906, Harvard University.		
Cox, Oliver Clemence	W. Va.	1320 11th Street.
Cruz, Adriano Talbos	P. I.	806½ I Street.
Davidian, Hagop	Asia Minor.	817 12th Street.
Downey, Alice Winans	D. C.	2473 18th Street.
Eisenberg, Arthur Alexander	D. C.	1213 4½ Street, S. W.
A.B., 1910, The George Washington University.		
Eppard, George Irving	Va.	1921 G Street.
Goss, Audrey	D. C.	1443 Mass. Ave.
Hayton, Charles Henry	D. C.	Emergency Hospital.
A.B., 1910, The George Washington University.		
Irmen, Felix Arnold	D. C.	Tuberculosis Hospital.
Jaeger, Henry William	D. C.	15 4th Street, S. E.
McMillan, Walter Alexis	D. C.	1317 F Street.
Mitsuyoshi, Fujio	Japan	1236 13th Street.
Molzahn, Albert John	Nebr.	Sibley Hospital.
Oliver, Harry Waterhouse	N. D.	Garfield Hospital.
Paige, Wendell Arthur Heath	Vt.	1365 E. Capitol Street.
Smith, Arthur C.	N. Y.	925 12th Street.
Williams, Robert Cleveland	N. C.	2517 14th Street.
A.B., 1907, University of North Carolina.		
Williams, Timothy Graham	N. C.	2517 14th Street.
Zimmerman, Carl George	N. Y.	925 12th Street.

Summary.

CANDIDATES FOR THE DEGREE OF M.D.:

First year	25
Second year	14
Third year	25
Fourth year	34
	98

DEPARTMENT OF DENTISTRY.

First Year.

Name.	Legal residence.	City address.
Alley, Edward Crawford	Ky.	1710 F Street.
Achsan, Samuel Charles	N. Y.	402 M Street.
Briggs, Elmer Ely	Pa.	1419 Ames Street, N. E.
Durfee, Claude	Ill.	3501 14th Street.
Eisenstein, Nathan	D. C.	825 Vermont Ave.
Fowler, Lawrence Jay	Kans.	128 W Street.
Fansler, Orville Newton	Md.	Agricultural Dept.
Glenn, Arthur H	D. C.	16 Q Street.
Hardester, John S	D. C.	314 E. Capitol Street.
Hogan, Arnold Wilbur	D. C.	929 G Street.
Hooper, Vernon V	N. C.	474 Penna. Ave.
Keeler, Elie Crist	Pa.	224 11th Street, S. E.
Marstella, John Preston	Ill.	3606 13th Street.
Madert, George William	D. C.	1322 Kenyon Street.
Maphis, Carl Burdette	W. Va.	829 Randolph Street.
Robertson, John P	Nebr.	1321 Irving Street.
Phifer, Allie Glenn	N. C.	637 E. Capitol Street.
Rich, Charles W	Pa.	1006 K Street, N. E.
Stoddard, Charles Judson	D. C.	2721 13th Street.
Smith, Robert Hamilton	D. C.	1746 Kalorama Road.
Simonton, Coleman Porter	W. Va.	53 K Street.
Silliman, Walter Brittin	Pa.	915 New York Ave.
Williams, Edward	N. Y.	3025 11th Street.

Second Year.

Angelo, Stuart Miller	D. C.	124 Seaton Street.
Bingman, Harry	Pa.	617 Morris Street, N. E.
Bingham, Gustavus A	N. C.	14 Eye Street, N. E.
Camalier, Caleb Willard	D. C.	28 Quincy Place, N. E.
Fowler, Robert Clinton	D. C.	710 10th Street, S. E.
Michaels, M. Manly	D. C.	624 G Street, N. E.
Rubira, A. Alfredo	Ecuador	800 11th Street.
Spillan, Henry Merle	N. Y.	728 13th Street.
White, George Elwood	Mass.	323 E. Capitol Street.
Zepp, W. Clarence	N. J.	C/o Ogram's Drug Store.

Third Year.

Name.	Legal residence.	City address.
Aronson, Richard	N. Y.	715 M Street.
Beers, Lloyd Yohe	Pa.	3125 14th Street.
McCausland, John McGirk	Pa.	1506 Caroline Street.
Levin, David	D. C.	1013 Linden Ave., Baltimore, Md.
Sandoval, Domiciano J	P. I.	941 New York Ave.
Stone, Eugene Roger	Wis.	1829 G Street.
Wood, Homer Ernest	D. C.	212 4th Street, N. E.

Summary.

CANDIDATES FOR THE DEGREE OF D.D.S.:

First year	23
Second year	10
Third year	7
	40

NATIONAL COLLEGE OF PHARMACY.

Freshman Class.

Name.	Legal residence.	City address.
Boyd, William A	D. C.	2901 Georgia Ave.
Buchanan, G. Clyde	N. C.	214 14½ Street, N. E.
Brockman, E. Cecil	Va.	1012 B Street, N. E.
Barnes, Forrest P	Ohio.	708 Mass. Ave., N. E.
Chamblin, Ralph V	Va.	Herndon, Va.
Clar, Benjamin	Russia.	914 P Street.
Dudley, Frederick E., Jr.	D. C.	204 Carroll Street, Takoma, D. C.
Daly, Herbert A	D. C.	1919 G Street.
Donohue, T. Francis	D. C.	3345 P Street.
Kinsey, Raymond D	D. C.	459 G Street, S. W.
Kloczewski, Albert Marian	D. C.	500 9th Street.
Kenner, Edwin A	D. C.	1711 17th Street.
Lear, Joseph	Russia.	739 13th Street.
Mix, Anna E	Md.	229 C Street, N. E.
Maxwell, David Lander	Tenn.	21st and G Streets.
Miller, Henry M., B.S	Ky.	Hygienic Lab., 25th and E Streets.
McCann, George E	Mass.	607 E Street.

Name.	Legal residence.	City address.
Neil, Joseph M.	Pa.	4314 8th Street.
Snider, Clyde E.	Okl.	24th and E Streets.
Shipman, Miles T.	Kans.	3528 11th Street.
Tennyson, Irving A.	Va.	224 N. Columbus Street, Alexandria, Va.
Umhau, John W.	D. C.	737 10th Street, S. W.
Whitley, Lawrence B.	N. C.	79 Seaton Place.
White, Herbert F.	Va.	1120 New York Ave.
Wiley, Clarence H.	Va.	1322 Q Street.
Whittesey, William H.	Ohio.	3407 Holmead Place.

Junior Class.

Anderson, Grace L.	Mo.	1721 21st Street.
Barker, Charles W.	Cal.	Room 407, P. O. Dept.
Colomb, William H.	Vt.	3401 14th Street.
Day, Harold L.	D. C.	1730 8th Street.
Elliott, Edna T.	Mich.	201 Md. Ave., N. E.
Feller, Frank M.	Va.	1335 Q Street.
Gorsuch, Albert F.	D. C.	812 8th Street, S. E.
Henry, Columbus W.	N. C.	22d and N Streets.
Morgan, Malcolm W.	Md.	Bethesda, Md.
Mayo, Redmond.	N. C.	1115 5th Street.
Swann, Edwin G.	Md.	Naval Medical School and Hospital.
Schweinhaut, Thomas F.	D. C.	327 Linworth Pl., S. W.
Smyser, Bert A.	Pa.	715 I Street, S. E.
Thyson, Leo C.	D. C.	2405 18th Street.
Wight, F. Leslie.	Va.	1329 F Street, N. E.

Senior Class.

Butler, Homer Kirk.	Md.	327 11th Street, S. E.
Beeson, Loring W.	Iowa.	664 Mass. Ave., N. E.
Boyer, Willard Day.	Md.	1748 8th Street.
Dammeyer, C. F. W.	Md.	11th and E. Capitol Sts.
Feller, Ralph W.	Va.	1335 Q Street.
Grubbs, Lindley Roy.	Md.	76 I Street.
Gass, Charles Benjamin.	Md.	14th and L Streets.
Gill, Theodoric Leith.	Va.	9th and P Streets.
Henderson, Charles W.	Va.	1415 Ames Pl., N. E.
Henderson, Willis K.	Va.	217 14th Street, N. E.
Hohberger, Samuel J.	Md.	65 R. I. Ave.
Hughes, Harry D.	D. C.	1325 29th Street.
Jones, William Sidney.	Va.	1509 Irving Street.

Name.	Legal residence.	City address.
Marsden, Frank B	D. C	1731 1st Street.
Norton, William H	Wash	136 6th Street, N. E.
Nelson, Gail E., B.S	S. Dak	1st and C Streets.
Snyder, Carl F	D. C	3111 16th Street.
Schommer, John B., LL.B	Wis	1st and R Streets.
Senay, Harry Paul	D. C	601 H Street, N. E.
Thompson, Milton H	D. C	14th and R Streets.
Whitebread, Charles	Wis	748 Gresham Place.

Students Taking Special Courses.

Pevare, John F	N. H	1621 13th Street, N. W.

Summary.

CANDIDATES FOR THE DEGREE OF PHAR.D.:

Freshman	26
Junior	15
Senior	21
Special	1
	63

COLLEGE OF VETERINARY MEDICINE.

First Year.

Name.	Legal residence.	City address.
Arche, Arturo	Porto Rico	2504 14th Street.
Behney, Jacob E	Pa	2115 14th Street.
Chadwick, Arthur Sidney	Mass	2219 1st Street.
Doyle, Simon A	Ireland	306 H Street.
Gillette, George H	Kans	1007 Virginia Ave., S.W.
Grenfell, Frederick Aloysius	D. C	1906 H Street.
Hargett, Ernest George	N. C	310 C Street.
Hooker, William Anson	Mass	1829 G Street.
Lambert, Fred W	Md	75½ R Street.
Littleford, Howard C	D. C	609 G Street, S. E.
McLaughlin, Edward Joseph	Ill	1230 B Street, S. W.
Martin, William Earl	Va	2113 14th Street.
Nicol, James Buchanan	Va	2115 14th Street.
Potteiger, Clarence B	Pa	1400 Chapin Street.
Tabler, Joseph H	D. C	Falls Church, Va.

Second Year.

Name.	Legal residence.	City address.
Ayers, A. T.	W. Va.	2113 14th Street.
Baiz, Leo	Porto Rico.	2504 14th Street.
Benjamin, Frank H.	Md.	Y. M. C. A.
Buchanan, J. Wesley	D. C.	502 M Street.
Clayton, Harry Thomas	Mo.	Treasury Dept.
Current, Jay B.	Ind.	217 4½ Street.
Earl, Warren Becker	N. Y.	Navy Department.
Hammer, Orrin Q.	Va.	1444 W Street.
Hodge, Joseph Ernest	Tenn.	1444 W Street.
Fake, Charles Thompson	N. Y.	1013 Lamont Street.
Holt, Campbell Floyd	Texas	Navy Department.
Lochboehler, Harry A.	Nebr.	1320 W Street.
McClure, Floyd I.	Pa.	1332 W Street.
McClure, Fred K.	Pa.	1332 W Street.
Marsh, Hadleigh	D. C.	3430 Brown Street.
Morcock, Julius Edward	Ga.	14th and W Streets.
Norris, James W.	Md.	1316 U Street.
Perrin, Edwin R.	Mich.	1320 W Street.
Rankin, John Owen	Mo.	1923 Biltmore Street.
Smith, Jesse K.	Ariz.	2115 14th Street.
Stahl, Benton Mehrling	D. C.	2113 14th Street.
Sanchez, Carlos	Argentinia.	2504 14th Street, N. W.

Third Year.

Brett, George Wesley	Mass.	2118 P Street.
Cotton, William Edwin	Iowa.	3242 38th Street.
Dillard, William Edward	Va.	2115 14th Street.
Divine, John Parker	D. C.	1463 Florida Ave.
Dunlavey, Robert Joseph	N. Y.	2113 14th Street.
Franz, Louis John	Wis.	Y. M. C. A.
Fry, William H.	D. C.	104 10th Street, S. E.
Graham, Charles R.	Pa.	1826 9th Street.
Graybill, Harry Webster	Iowa.	1828 15th Street.
Grubb, Chauncey Merle	Md.	2320 Ontario Road.
Hicks, Greydon St. C.	Mich.	621½ Park Road.
Hicks, Tunis	Mich.	621½ Park Road.
Hornbaker, Joseph Nourse	Va.	2009 Kalorama Road.
Hugins, Frank Almon	Mass.	1355 Spring Road.
Humphrey, Charles William	Pa.	327 Penna. Ave., S. E.
Kernick, James	Mich.	316 C Street.
Koon, George Henry	Ohio	2320 Ontario Road.

Name.	Legal residence.	City address.
Kushner, Albert	Md.	2115 14th Street.
Lowry, William B	D. C.	1827 6th Street, N. W.
McCarthy, Henry Joseph	Md.	226 G Street, N. E.
McCray, Arthur Howard	Ohio	Dept. of Agriculture.
Maher, William Albert	Va.	220 12th Street, S. E.
Miller, Ezra William	Va.	1332 W Street.
Moore, Charles S	Mich.	2323 University Place.
O'Hara, William Henry	Wis.	2414 N. Capitol Street.
Plunkert, Charles M	D. C.	435 O Street.
Riley, Edward Henry	Okla.	Dept. of Agriculture.
Shore, Howard J	N. C.	2113 14th Street.

Summary.

CANDIDATES FOR THE DEGREE OF D.V.M.:

First year	15
Second year	22
Third year	28
	65

GEOGRAPHICAL DISTRIBUTION.

Alabama	7	Pennsylvania	64
Arizona	3	Rhode Island	4
Arkansas	2	South Carolina	11
California	5	South Dakota	9
Colorado	3	Tennessee	12
Connecticut	9	Texas	10
Delaware	3	Utah	5
District of Columbia	486	Vermont	13
Florida	2	Virginia	77
Georgia	5	Washington	6
Idaho	3	West Virginia	14
Illinois	32	Wisconsin	21
Indiana	17		
Iowa	23	Argentine	1
Kansas	17	Asia Minor	1
Kentucky	12	Austria	2
Louisiana	4	Canada	1
Maine	12	China	9
Maryland	66	Cuba	1
Massachusetts	45	Ecuador	1
Michigan	31	Egypt	1
Minnesota	23	England	2
Mississippi	2	France	2
Missouri	20	Germany	3
Montana	1	Greece	2
Nebraska	12	Ireland	1
New Hampshire	5	Japan	1
New Jersey	9	Mexico	1
New Mexico	1	Norway	1
New York	52	Philippine Islands	5
North Carolina	30	Porto Rico	5
North Dakota	4	Russia	3
Ohio	31	Servia	1
Oklahoma	5	Venezuela	1
Oregon	4		
			1,277

RECAPITULATION.

MEMBERS OF FACULTY AND TEACHING STAFF OF THE UNIVERSITY AND THE ASSOCIATED COLLEGES. (In many instances members of the Teaching Staff give only part time to the University):

Professors	67
Associate Professors	7
Assistant Professors	19
Associates, Lecturers, Instructors, Demonstrators, and Assistants	83
Total	176

STUDENTS REGISTERED IN THE UNIVERSITY, 1910–11.

DEPARTMENT OF ARTS AND SCIENCES:

Faculty of Graduate Studies	54
College of Arts and Sciences	281
College of Engineering and Mechanic Arts	176
College of the Political Sciences	77
Teachers College	93

PROFESSIONAL DEPARTMENTS:

Department of Law	343
Department of Medicine	98
Department of Dentistry	40

ASSOCIATED COLLEGES:

National College of Pharmacy	63
College of Veterinary Medicine	65
Total	1,290
Duplicates	13
Total	1,277

Degrees Conferred.

DEGREES CONFERRED AT FALL CONVOCATION, 1910.

IN COURSE.

Bachelor of Arts.

Clarence Gilbert Farwell.

Bachelor of Laws.

William Ernest Faulkner.
A.B., 1907, Union College.

Master of Patent Law.

Chester Harmon Braselton.
B.S., 1904, Valparaiso University.
Carl A. Hellman.
B.S., 1906, M.S., 1909, University of Illinois.
Nathan Cohen.
E.E., 1906, University of Minnesota.

Doctor of Medicine.

Lewis William Fetzer.
Katherine M. Herring.
Nesmith P. Nelson.

DEGREES CONFERRED AT WINTER CONVOCATION, 1911.

IN COURSE.

Master of Arts.

Joseph Plass, Germany.

Civil Engineer.

Glenn Rupert Lawrence, District of Columbia.

Bachelor of Arts.

John Knox Arnold, Kentucky.
Chien Shii Fan, China.

Teacher's Diploma.

Mildred Floyd Johnston, District of Columbia.
A.B., 1909, The George Washington University.

Master of Laws.

Charles Hermon Patterson, New York.

Bachelor of Laws.

Walter Eames Blount, District of Columbia.
Robert Lundie Mackenzie, Oregon.
Claud Henry McCray, New York.
Herbert William White, Iowa.

Bachelor of Law.

A. Lapin Cohen, Wisconsin.

Doctor of Medicine.

Audrey Goss, District of Columbia.

DEGREES CONFERRED AT COMMENCEMENT, 1911.

HONORARY.

Doctor of Laws.

Elmer Ellsworth Brown.
Francis Mackall Gunnell.

Doctor of Medicine.

Leland Ossian Howard.

IN COURSE.

Doctor of Philosophy.

George Nelson Coffey, North Carolina.
Ph.B., 1900, University of North Carolina.
M.S., 1908, The George Washington University.

Hayner Haskell Gordon, Ohio.
B.S. in E.E., 1908, E.E., 1909, The George Washington University.

Grace Helen Kent, Vermont.
A.B., 1902, A.M., 1904, University of Iowa.

Charles Neil McBryde, Virginia.
B.S., 1891, University of South Carolina.
M.S., 1893, The Virginia Polytechnic Institute.
M.D., 1897, The Johns Hopkins University.

Edwin Wiley, Virginia.
B.S., 1891, A.B., 1898, A.M., 1898, University of Tennessee.

Master of Arts.

Bertha Frances Wolfe, Indiana.
A.B., 1884, Southern Indiana Normal College.

Master of Arts and Master's Diploma in Education.

Henry Francis Lowe, District of Columbia.
L.I., 1890, College of William and Mary.
B.S., 1903, The George Washington University.

Master of Science.

Julia Theckla Macmillan, District of Columbia.
B.S., 1907, The George Washington University.

Civil Engineer.

Irving Randolph Saum, District of Columbia.
B.S. in C.E., 1910, The George Washington University.

Doctor of Civil Law.

Paca Oberlin, Virginia.
LL.B., 1903, LL.M., 1904, Columbian University.

Bachelor of Arts.

Hilda Beale, District of Columbia.
(With distinction.)

Warren Jefferson Davis, Virginia.
Roy Linney Deal, North Carolina.
William Duane Fulton, Jr., Ohio.
Robert Johnson, Missouri.
Emery Liebschutz Lasier, New Hampshire.
Edith Blinston Lowe, District of Columbia.
Winfield Scott Mason, California.
Kenneth Fuller Maxcy, District of Columbia.
Helen Sellman Nicholson, District of Columbia.
(With distinction.)

Arnold Clarence Otto, Wisconsin.
James Rierson Smith, North Carolina.
Helen Summy, District of Columbia.
William John Denziloe Thomas, District of Columbia.
Clarendon Haysmer Thompson, Michigan.
Prescott Stearns Tucker, District of Columbia.
(With distinction.)

Ethel Marguerite Weller, District of Columbia.
(With distinction.)

Bachelor of Arts and Teacher's Diploma.

Katherine Harper Bevard, District of Columbia.
Reuben Finkelstein, District of Columbia.
Helen Burnett Gardner, District of Columbia.
Robert Lee Haycock, District of Columbia.
(With distinction.)
Mary Beatrice Hilleary, District of Columbia.
Alice Mary Richards, District of Columbia.
(With distinction.)
Bertha Florine Walker, District of Columbia.

Bachelor of Science.

Edwin Henry Ingersoll, District of Columbia.
Clifford Alonzo Rowley, District of Columbia.
Laura Winfield Steever, Maryland.

Bachelor of Science in Chemistry.

William Firey Maupin, North Carolina.

Bachelor of Science in Civil Engineering.

Harold Kennedy Craig, District of Columbia.
Theodore Lyman Moody, Maryland.
Augustin Mitchell Prentiss, South Carolina.

Bachelor of Science in Electrical Engineering.

Calvert Burke Gill, Maryland.
Henry Frank Wiegand, District of Columbia.
(With distinction.)

Bachelor of Science in Mechanical Engineering.

Roy Franklin Carty, District of Columbia.
Frank Atherton Howard, District of Columbia.
Oliver Lloyd Jenkins, Indiana.
Dana McGuffey Lasley, District of Columbia.

Bachelor of Science in Architecture.

Louis Henry Eugene Justement, District of Columbia.
Joseph Nicolay Nielsen, Illinois.

Master of Diplomacy.

John Knox Arnold, Kentucky.

Master of Patent Law.

Edgar Whittington Adams, Illinois.
B.S. in E.E., 1908, Armour Institute of Technology.
LL.B., 1910, National University Law School.

Ira James Adams, Kansas.
B.S., 1906, University of Kansas.
LL.B., 1910, National University Law School.

Lilian Brock Aveilhé, District of Columbia.
LL.B., 1905, Washington College of Law.

John Boyle, Jr., Massachusetts.
S.B., 1901, Massachusetts Institute of Technology.

Robert Alan Brannigan, District of Columbia.

Jesse Miller Campbell, Missouri.
D.D.S., 1888, National University.
LL.B., 1910, Washington College of Law.

Melville Durant Church, District of Columbia.

Anne Elizabeth Draper, New York.
LL.B., 1908, Washington College of Law.

Elizabeth Tyler Evans, District of Columbia.
LL.B., 1908, Washington College of Law.

Herman Trafton Gammons, District of Columbia.
S.B., 1906, Massachusetts Institute of Technology.
LL.B., 1908, LL.M., 1909, National University Law School.

George F. Gourley, Maryland.
LL.B., 1909, LL.M., 1910, National University Law School.

William Archibald Graff, Virginia.
LL.B., 1910, The George Washington University.

Sophie Bishop Kent, Rhode Island.
LL.B., 1907, LL.M., 1908, Washington College of Law.

George Peter Kimmel, Kansas.
LL.B., 1910, Georgetown University.

Harold Avery Kingsbury, District of Columbia.
LL.B., 1910, National University Law School.

Floyd John Porter, New York.
LL.B., 1909, LL.M., 1910, National University Law School.

Lester Lyman Sargent, Massachusetts.
LL.B., 1910, Georgetown University.

John McAllister Stevenson, Jr., Texas.
A.B., 1903, Yale University.
LL.B., 1910, University of Texas.

La Mont Abner Williams, District of Columbia.
LL.B., 1901, State University of Iowa.

Bachelor of Laws.

Richard Earle Babcock, District of Columbia.

Edward Damon Baldwin, Oregon.
B.Lit., 1906, Whitman College.
M.A., 1909, The George Washington University.

Carl Martin Behrmann, Illinois.

George Beneman, Maryland.

Paul Earl Bradley, Illinois.

John Wentworth Calvert, Maryland.

John Condict Carpenter, District of Columbia.
M.E., 1908, Cornell University.

Joseph Ryland Curl, District of Columbia.
(With distinction.)
B.S., 1909, The George Washington University.

Franz Frederick William Dahn, Minnesota.
B.S., 1909, The George Washington University.

James Dunbar Dodson, District of Columbia.

Hsen Shuen Foo, China.
A.B., 1906, The Ching Chong School.

Jay Lyman Gray, Maine.
A.B., 1908, Bowdoin College.

William Robinson Grover, Michigan.
Ph.B., 1907, Kalamazoo College.

Arthur Hellen, District of Columbia.

David Paul Herriott, Pennsylvania.
A.B., 1905, Washington and Jefferson College.

Hermon Henry Hill, Massachusetts.
A.B., 1907, Dartmouth College.

Louis Bronson Le Duc, District of Columbia.

Soterios Nicholson, Greece.

Gideon Johnson Pillow, Louisiana.

Ernest Frederic Alan Place, New York.

Conger Ryder Smith, Michigan.

Oscar Thompson, Wisconsin.

Rufus Harold Tilton, Massachusetts.
Ph.B., 1908, Wesleyan University.

William Cabell Van Vleck, District of Columiba.
(With distinction.)
A.B., 1908, The George Washington University.

Lane Davis Webber, Indiana.

Warner Lambeth Wilmeth, Texas.

Bachelor of Law.

James William Berry, District of Columbia.
A.B., 1909, The George Washington University.

Edward Wright Byrn, Jr., Maryland.

Clarence Benjamin Dutton, Massachusetts.

Matthew Singleton Farmer, Jr., North Carolina.

Stanley Herman Fischer, District of Columbia.

William Wright Fraser, Maryland.
A.B., 1905, New Windsor College.

Herbert Benjamin Gerhart, Pennsylvania.

Frank Willard Hoover, District of Columbia.

William Shepherd Linnell, Maine.
A.B., 1907, Bowdoin College.

Samuel Moyer, Pennsylvania.

Richard Blakelock Owen, District of Columbia.

Ferdinand Henry Pease, Vermont.
A.B., 1907, University of Vermont.

Justin Frank Seiler, Ohio.
A.B., 1908, M.A., 1910, The George Washington University.

Thomas William Smith, Idaho.

Thomas Peachy Spencer, Virginia.
A.B., 1905, William and Mary College.

Eugene Charles Wann, District of Columbia.

Doctor of Medicine.

Arne O. Arneson, North Dakota.

Ewald George Baum, Wisconsin.
(With distinction.)

Charles Le Roy Brock, District of Columbia.

Philip Castleman, Massachusetts.
B.S., 1906, Harvard University.

Oliver Clemence Cox, West Virginia.

Adriano Talbos Cruz, Philippine Islands.

Arthur Alexander Eisenberg, District of Columbia.
(With distinction.)
A.B., 1910, The George Washington University.

George Irving Eppard, Virginia.

Charles Henry Hayton, District of Columbia.
A.B., 1910, The George Washington University.

Felix Arnold Irmen, District of Columbia.

Henry William Jaeger, District of Columbia.

Albert John Molzahn, Nebraska.
B.S., 1906, Fremont College.

Harry Waterhouse Oliver, North Dakota.
Wendell Arthur Heath Paige, Vermont.
Arthur C. Smith, New York.
Carl George Zimmerman, New York.

Doctor of Dental Surgery.

Lloyd Yohe Beers, Pennsylvania.
John McGirk McCausland, Pennsylvania.
David Levin, District of Columbia.
Domiciano J. Sandoval, Philippine Islands.
A.B., Colegio de San Juan de Letran, Manila, P. I.
Eugene Roger Stone, Wisconsin.
Homer Ernest Wood, District of Columbia.

Doctor of Pharmacy.

Loring W. Beeson, Iowa.
Willard Day Boyer, Maryland.
Homer Kirk Butler, Maryland.
Ralph White Feller, Virginia.
Charles Benjamin Gass, Maryland.
Theodore Leith Gill, Virginia.
Charles W. Henderson, Virginia.
William Sidney Jones, Virginia.
Gail Eldridge Nelson, South Dakota.
B.S., 1907, Agricultural and Mechanical College, Oklahoma.
Carl F. Snyder, District of Columbia.
Charles Whitebread, Wisconsin.

Doctor of Veterinary Medicine.

George Wesley Brett, Massachusetts.
William Edwin Cotton, Iowa.
William Edward Dillard, Illinois.
John Parker Divine, Virginia.
Robert Joseph Dunlavey, New York.
John Louis Franz, Wisconsin.
William Hamilton Fry, District of Columbia.
Charles Roy Graham, Pennsylvania.
Harry Webster Graybill, Nebraska.
B.Sc., 1900, M.A., 1902, University of Nebraska.
Chauncey Merle Grubb, Maryland.
Tunis Hicks, Michigan.
Frank Almon Hugins, Massachusetts.

Joseph Nourse Hornbaker, Virginia.
Charles William Humphreys, Pennsylvania.
James Henry Kernick, Michigan.
D.V.S., 1910, United States College of Veterinary Surgeons.
George Henry Koon, New York.
Albert Kushner, Maryland.
William Buck Lowry, District of Columbia.
Henry Joseph McCarthy, Maryland.
Arthur Howard McCray, Ohio.
B.S., 1909, Ohio State University.
Ezra William Miller, Virginia.
Charles Somerville Moore, Michigan.
B.S., 1908, The George Washington University.
William Henry O'Hara, Wisconsin.
Edward Henry Riley, Minnesota.
B.Agr., 1903, University of Minnesota.
Howard James Shore, North Carolina.

Doctors of Philosophy.

During the years 1894 to 1911, inclusive, the University has conferred the degree of Doctor of Philosophy, after examination and the presentation and public defense of a thesis, upon the following persons:

1894.

*Edward Farquhar, (Greek)
Thesis: Elements of Unity in the Homeric Poems. (Conservative Review, vol. iii, June-September, 1900.)

Walter Scott Harshman, (Theoretical Astronomy)
M.S., 1892, Columbian University.
Thesis: Investigation of the Motion of the Pericentre of Deimos. (Astronomical Journal, Boston, vol. xiv, pp. 145-148, 1894.)

Professor Frank Hall Knowlton, (Botany)
B.S., 1884, M.S., 1887, Middlebury.
Thesis: The Flora of the Laramie Group and Allied Formations. (Not published.)

Claude Augustus Oscar Rosell, (Chemistry)
M.A., 1881, University of Pennsylvania; LL.B., 1886, Georgetown University.
Thesis: Investigation of the Properties of Ferric Acid. (J. Am. Chem. Soc., vol. xvii, pp. 760-769, 1895.)

1895.

George Wesley Hamner, (History)
B.A., 1882, M.A., Hiawassee College; LL.B., 1885, University of Alabama; LL.M., 1886, Georgetown University.
Thesis: Researches upon the Government of the Creek Indians. (Not published.)

1896.

Edward Clark Hudson, (Greek)
B.A., 1884, M.A., 1894, Hiawassee College; M.A., 1894, Columbian University.
Thesis: Investigation into the Use of the Genitive Case in Greek. (Not published.)

Rev. James Stephen Lemon, (Psycho-physics)
B.A., 1864, M.A., 1867, Wesleyan University, Middletown, Conn.
Thesis: The Skin Considered as an Organ of Sensation. (Published separately, 1898, 70 pp.)

1897.

Professor Charles Arthur Hollick, (Palæobotany)
Ph.D., 1879, Columbia College.
Thesis: Palæobotany of the Yellow Gravel at Bridgeton, N. J. (Not published.)

*Deceased.

John Scott Johnson, (Philosophy)
B.S., 1893, M.A., 1894, Columbian University.
Thesis: The Influence of French Thought on the Formation of the Constitution of the United States. (Not published.)

Timothy William Stanton, (Palæontology)
B.S., 1883, M.S., 1895, University of Colorado.
Thesis: A Comparative Study of the Lower Crataceous Formation and Faunas of the United States. (Jour. of Geology, pp. 1-49, September-October, 1897.)

1898.

*Cabell Whitehead, (Chemistry)
B.M., 1885, Lehigh University; M.S., 1895, Columbian University.
Thesis: A Study of the Tellurides; Their Formation and Chemical Properties. (G. W. U. Bull., 5 [4], 65-68, 1906.)

1900.

Eugene A. Byrnes, (Physical Chemistry)
B.A., 1884, Michigan University; LL.B., 1887, LL.M., 1888, Columbian University.
Thesis: Experiments on the Direct Conversion of the Energy of Carbon into Electrical Energy. (1, "Voltaic Cells with Fused Electrolytes"; 2, "Notes on Metallic Diaphragms." Trans. Amer. Electrochemical Society. Vol. 2, pp. 113-121. Vol. 4, p. 135.)

Rev. Benjamin Alfred Dumm, (Philosophy)
B.A., 1886, M.A., 1889, Western Maryland College.
Thesis: The Concept of Self in the Analysis of Experience. (Not published.)

Professor Charles Russell Ely, (Chemistry)
A.B., 1891, A.M., 1897, Yale College.
Thesis: Investigation of the Phenomenon of Deliquescence and the Capacity of Salts to Attract Water Vapor. (G. W. U. Bull., 5 [4], 69-74, 1906.)

Ernestine Fireman, (Chemistry)
M.S., 1898, Columbian University.
Thesis: The Action of Phosphonium Iodide on Tetra and Penta Chlorides. (Am. Chem. Jour., 30, 116-133, 1903.)

Charles Moore, (American History)
A.B., Harvard; M.A., 1898, Columbian University.
Thesis: The Northwest under Three Flags. (Published separately by Harper & Bros., New York, 1900, 402 pp.)

1901.

William Hamilton, (American History)
B.A., 1891, Moravian College, Pennsylvania; M.A., 1894, Columbian University.
Thesis: The Expansion of Russia to the Eastward. (Not published.)

Chohei Shirasu, (Economics)
Graduate, 1893, Doshisha University, Japan; A.M., 1899, Yale University.
Thesis: The Development of Commerce in Japan and its Effect on Civilization. (Summary of Commerce and Finance for December, 1901, Bureau of Statistics, U. S. Treasury Department, pp. 2227-2315.)

*Deceased.

1902.

Rev. Frank Leighton Day, (Anthropology)
B.A., 1891, M.A., 1896, Roanoke College; B.D., 1895, Vanderbilt University.
Thesis: Did the Semites Pass through a Totem Stage? (Not published.)

Nevil Monroe Hopkins, (Chemistry)
B.S., 1899, M.S., 1900, Columbian University.
Thesis: Some Experiments on Electrolytic Conductivity with Reference to the Ionic Theory. (G. W. U. Bull., 3 [3], 91-94, 1904.) (Published separately as "Experimental Electrochemistry," by D. Van Nostrand Company, New York, 1905, 284 pp., 231 ill.)

1903.

Edwin Allston Hill, (Chemistry)
A.B., 1875, A.M., 1902, Yale University; M.S., 1901, Columbian University.
Thesis: The Constitution of Certain Halogen Oxyacids as inferred from Thermochemical Data. (G. W. U. Bull., 3 [4], 94-103, 1904.)

William Mather Lamson, (Architecture)
B.S., 1897, C.E., 1899, Columbian University.
Thesis: Iron and Steel Domes. (Not published.)

Thomas Malcolm Price, (Biochemistry)
B.S., Maryland Agricultural College; M.S., 1900, Columbian University.
Thesis: The Influence of Varying Strength Solutions of Formaldehyde on some of the Enzymes of Animal Origin. (G. W. U. Bull., 3 [4], 104-108, 1904.)

Harriet Richardson, (Zoölogy)
A.B., 1896, A.M., 1901, Vassar College.
Thesis: Contributions to the Natural History of the Isopoda. (Proc. U. S. Nat. Museum, 27, 1-89, 1904, and Bull. U. S. Fish Com., pp. 47-54, September 17, 1903.)

1904.

William Macon Coleman, (History)
A.B., 1858, A.M., 1892, University of North Carolina.
Thesis: A Refutation of Mommsen's Theory on Cæsar's Agrarian Policy. (Not published.)

Frank Van Vleck, (Mechanical Engineering)
M.E., 1884, Stevens' Institute of Technology.
Thesis: Improvements in Ship Construction. (Not published.)

Andrew Wilson, (American History)
B.S., 1885, B.O., 1886, B.A., 1886, M.A., 1890, Kansas Normal College; LL.B., 1890, LL.M., 1891, Georgetown University; M.L., 1892, D.C.L., 1893, Yale University.
Thesis: Influence of John Marshall on the Political History of the United States. (Not published.)

1905.

Ray Smith Bassler, (Palæontology)
B.A., 1902, University of Cincinnati; M.S., 1903, The Columbian University.
Thesis: A Study of the James Types of Ordovician and Silurian Bryozoa. (Proc. U. S. Nat. Museum, xxx, 1906, 1-66, pls. I-IV.)

Hiram Colver McNeil, (Chemistry)
B.S., 1896, M.S., 1899, Denison University.
Thesis: On the Constitution of Certain Natural Silicates. (G. W. U. Bull., 4 [3], 76-79, 1905.) (Journal American Chemical Society [28], 590-602, 1906.)

Henry Albert Pressey, (Hydraulic Engineering)
B.S., 1893, The Columbian University; B.S., 1896, Massachusetts Institute of Technology.
Thesis: Flow of Water in Channels. (Not published.)

Warren Waverley Phelan, (Comparative Jurisprudence)
B.A., 1894, M.A., 1896, Columbian University.
Thesis: An Historical Sketch of the Criminal Law of Louisiana from the Founding of the Colony to the Establishment of the State. (Not published.)

1906.

Cornelius Lott Shear, (Botany)
B.S., 1896, M.S., 1900, University of Nebraska.
Thesis: Cranberry Diseases. (G. W. U. Bull., 5 [4], 75-78, 1906. Bulletin 110, Bureau of Plant Industry, U. S. Department of Agriculture, 1907.)

Martin Norris Straughn, (Agricultural Chemistry)
B.S., 1899, Maryland Agricultural College; M.S., 1902, Columbian University.
Thesis: The Chemistry of Different Varieties and Individual Ears of Sweet Corn as Affected by Enzymes, Climatic Conditions, and Breeding. (Bulletin 120, Maryland Agricultural Experiment Station, 1907.)

1907.

Rev. George Brodthage, (Germanics)
Universities of Strasburg, Berlin and Göttingen.
Thesis: Germanentum, Gottmenschentum. (G. W. U. Bull., 6 [3], 82-86, 1907.)

Frederick Warren Grover, (Physics)
B.S., 1899, Massachusetts Institute of Technology; M.S., 1901, Wesleyan University, Connecticut.
Thesis: Simultaneous Measurement of the Capacity and Power Factor of Condensers. (G. W. U. Bull., 6 [3], 92-95, 1907. Bulletin of the Bureau of Standards, May 23, 1907, Reprint No. 64, pp. 371-431.)

Edward Elliott Richardson, (Philosophy)
B.S., 1904, M.D., 1905, M.S., 1905, George Washington University.
Thesis: Mechanism and Teleology. (G. W. U. Bull., 6 [3], 87-91, 1907.)

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1894, Cincinnati Hebrew Union College; B.L., 1894, University of Cincinnati.
Thesis: The Constructive Character and Function of Religion in Human Progress as Illustrated by the Religion of Israel. (Not published.)

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B.S. in Chemistry, 1904, Columbian University; B.S. in General Science, 1905, Harvard University; M.S., 1906, Yale University.
Thesis: Contributions to the Knowledge of Tellurium. (Not published.)

Warner W. Stockberger, (Botany)
B.S, 1902, Denison University.
Thesis: The Effect of Certain Toxic Solutions on Nuclear and Cell Division in Root Tips of Vicia Faba. (Not published.)

Frank Cummings Cook, (Chemistry)
B.A., 1900, M.A., 1902, M.S., 1904, Yale University.
Thesis: Phosphorus Metabolism Experiments. (Bulletin 123, U. S. Bureau of Chemistry, 63 pp.)

1908.

Clara Southmayd Ludlow, (Preventive Medicine)
B.S, 1900, M.S., 1901, A. and M. College, Mississippi.
Thesis: The Mosquitoes of the Philippine Islands. The distribution of certain species and their occurrence in relation to the incidents of certain diseases. (Published separately, Washington, D. C., 1908, 65 pp.)

Benjamin George Wilkinson, (History)
B.A., 1897, University of Michigan; M.A., 1905, Union College.
Thesis: The Overthrow of the Concordat by the Third Republic. (Not published.)

1909.

William Clifton Phalen, (Geology)
S.B., 1899, S.M., 1902, Massachusetts Institute of Technology.
Thesis: Economic Geology of the Kenova Quadrangle in Kentucky, Ohio, and West Virginia. (Bulletin 349, U. S. Geological Survey.)

Harry Wilson Houghton, (Biochemistry)
B.S. in Chemistry, 1906, M.S., 1907, The George Washington University.
Thesis: The Effect of Cold Storage on Chicken Meat. (Not published.)

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B.S., 1900, Oklahoma Agricultural and Mechanical College; M.D., 1905, The George Washington University.
Thesis: The Possibility of Shellfish Contamination from Sewage-Polluted Waters. (Bulletin 136, U. S. Bureau of Chemistry, 53 pp.)

Luther Hess Waring, (Germanics)
B.A., 1905, The George Washington University; M.A., 1904, Columbian University.
Thesis: Martin Luther's Political Reforms of Germany. (Not published.)

1910.

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B.A., 1906, M.A., 1907, M.Dip., 1908, The George Washington University.
Thesis: The Relation of the Dutch Republic to the American Revolution. (Not published.)

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B.S, 1900, M.S., Kentucky State College.
Thesis: The Naciminto and Torrejon Formations of the Puerco Group.

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B.S., 1884, New Hampshire College of Agriculture and Mechanic Arts; M.S., 1900, Columbian University.
Thesis: Solar Radiation, Atmospheric Absorption and Sky Polarization.

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B.Sc., 1899, Gale College; M.A., 1905, M.S., 1906, Oklahoma State University.
Thesis: On some Mental Processes of the Rhesus Monkey. (Psychological monographs, vol. xii, No. 5, 61 pp.)

1911.

George Nelson Coffey, (Geology)
Ph.B., 1900, University of North Carolina; M.S., 1908, The George Washington University.
Thesis: A Study of the Soils of the United States. (Not published.)

Hayner Haskell Gordon, (Engineering)
B.S. in E.E., 1908, E.E., 1909, The George Washington University.
Thesis: An Investigation of the Action of the Crystal Rectifying Delectors. (Not published.)

Grace Helen Kent, (Psychology)
A.B., 1902, A.M., 1904, University of Iowa.
Thesis: Experiments on Habit Formation in Dementia Præcox. (Not published.)

Charles Neil McBryde, (Preventive Medicine)
B.S., 1891, University of South Carolina; M.S., 1893, The Virginia Polytechnic Institute; M.D., 1897, The Johns Hopkins University.
Thesis: A Bacteriological Study of Ham Souring. (Bulletin 132, U. S. Bureau of Animal Industry, pp. 55.)

Edwin Wiley, (English)
B.S., 1891, A.B., 1898, A.M., 1898, University of Tennessee.
Thesis: Shakespeare's Treatment of the Supernatural in the Light of Contemporary Thought and Opinion. (Not published.)

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PART I

GENERAL AND HISTORICAL

1912							1913							1913						
JULY							**JANUARY**							**JULY**						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	1	2	3	4	5	6	..	..	..	1	2	3	4	..	..	1	2	3	4	5
7	8	9	10	11	12	13	5	6	7	8	9	10	11	6	7	8	9	10	11	12
14	15	16	17	18	19	20	12	13	14	15	16	17	18	13	14	15	16	17	18	19
21	22	23	24	25	26	27	19	20	21	22	23	24	25	20	21	22	23	24	25	26
28	29	30	31	..	..	..	26	27	28	29	30	31	..	27	28	29	30	31	..	..
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AUGUST							**FEBRUARY**							**AUGUST**						
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11	12	13	14	15	16	17	9	10	11	12	13	14	15	10	11	12	13	14	15	16
18	19	20	21	22	23	24	16	17	18	19	20	21	22	17	18	19	20	21	22	23
25	26	27	28	29	30	31	23	24	25	26	27	28	..	24	25	26	27	28	29	30
..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	..	..	..	..	..	..
SEPTEMBER							**MARCH**							**SEPTEMBER**						
1	2	3	4	5	6	7	..	..	..	..	..	..	1	..	1	2	3	4	5	6
8	9	10	11	12	13	14	2	3	4	5	6	7	8	7	8	9	10	11	12	13
15	16	17	18	19	20	21	9	10	11	12	13	14	15	14	15	16	17	18	19	20
22	23	24	25	26	27	28	16	17	18	19	20	21	22	21	22	23	24	25	26	27
29	30	..	..	..	..	..	23	24	25	26	27	28	29	28	29	30	.	..	..	.
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OCTOBER							**APRIL**							**OCTOBER**						
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6	7	8	9	10	11	12	6	7	8	9	10	11	12	5	6	7	8	9	10	11
13	14	15	16	17	18	19	13	14	15	16	17	18	19	12	13	14	15	16	17	18
20	21	22	23	24	25	26	20	21	22	23	24	25	26	19	20	21	22	23	24	25
27	28	29	30	31	..	..	27	28	29	30	..	..	..	26	27	28	29	30	31	..
NOVEMBER							**MAY**							**NOVEMBER**						
..	..	..	..	..	1	2	..	..	..	..	1	2	3	..	..	..	..	..	..	1
3	4	5	6	7	8	9	4	5	6	7	8	9	10	2	3	4	5	6	7	8
10	11	12	13	14	15	16	11	12	13	14	15	16	17	9	10	11	12	13	14	15
17	18	19	20	21	22	23	18	19	20	21	22	23	24	16	17	18	19	20	21	22
24	25	26	27	28	29	30	25	26	27	28	29	30	31	23	24	25	26	27	28	29
..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..
DECEMBER							**JUNE**							**DECEMBER**						
1	2	3	4	5	6	7	1	2	3	4	5	6	7	..	1	2	3	4	5	6
8	9	10	11	12	13	14	8	9	10	11	12	13	14	7	8	9	10	11	12	13
15	16	17	18	19	20	21	15	16	17	18	19	20	21	14	15	16	17	18	19	20
22	23	24	25	26	27	28	22	23	24	25	26	27	28	21	22	23	24	25	26	27
29	30	31	..	..	..	..	29	30	..	..	..	..	..	28	29	30	31	..	..	..
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UNIVERSITY CALENDAR.

1912.

June 5, *Wednesday.*—University Commencement.

SUMMER VACATION.

September 25, *Wednesday.*—Academic Year begins in all Departments of the University.

October 9, *Wednesday.*—Stated meeting of the Board of Trustees.

October 21, *Monday.*—Last day for registration for the first term without late-registration fee.

November 28-30, *Thursday* to *Saturday,* both inclusive.—Thanksgiving recess.

RECESS FROM DECEMBER 23, 1912, TO JANUARY 2, 1913, BOTH INCLUSIVE.

1913.

January 8, *Wednesday.*—Stated meeting of the Board of Trustees.

January 27, *Monday.*—Last day on which dissertations may be presented.

February 3, *Monday.*—Second Term begins.

February 10, *Monday.*—Doctorate Disputation.

February 20, *Thursday.*—Last day for registration for the second term without late-registration fee.

February 22, *Saturday.*—A holiday in all Departments of the University.

March 21-24, *Friday* to *Monday,* both inclusive.—Easter holidays.

March 25, *Tuesday.*—Davis Prize Speaking.

May 1, *Thursday.*—Last day on which dissertations may be presented.

May 19, *Monday.*—Doctorate Disputation.

May 20-23, *Tuesday* to *Friday.*—Examinations for admission.

May 30, *Friday.*—A holiday in all Departments of the University.

June 4, *Wednesday.*—Annual meeting of the Board of Trustees.

June 8, *Sunday.*—Baccalaureate Sermon.

June 11, *Wednesday.*—University Commencement.

THE LEGAL HISTORY OF THE CORPORATION.

The George Washington University is the successor of "the Columbian College in the District of Columbia," which was chartered by Act of Congress in 1821. The name and title of the Columbian College were in 1873 changed by an Act of Congress, under the terms of which the College was given the name of "the Columbian University." The Columbian University was by Act of Congress in 1904 authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education. The Board of Trustees elected to take the name of "the George Washington University," and the name was approved by the Government officials, as required by the statute; the change of name going into effect September 1, 1904. All the Acts of Congress now in force relative to the Columbian College and the Columbian University are therefore parts of the charter of the George Washington University.

The original charter of the Columbian College was as follows:

An Act to incorporate the Columbian College, in the District of Columbia.

Be it enacted, &c., That there be erected, and hereby is erected and established, in the District of Columbia, a College, for the sole and exclusive purpose of educating youth in the English, learned, and foreign languages, the liberal arts, sciences, and literature; the style and title of which shall be, and hereby is declared to be, "The Columbian College in the District of Columbia."

SEC. 2. *And be it further enacted,* That the said College shall be under the management, direction, and government of a number of Trustees, not exceeding thirty-one, to be elected triennially, by the contributors to the said College, qualified to vote, in such manner, and under such limitations and restrictions, as may be provided by the ordinances of the College, on the first Monday in May; and that the first Trustees of the said College shall consist of the following persons, viz: Obadiah B. Brown, Luther Rice, Enoch Reynolds, Josiah Meigs, Spencer H. Cone, Daniel Brown, Return J. Meigs, Joseph Gibson, Joseph Cone, Thomas Corcoran, Burgis Allison, Thomas Sewall, and Joseph Thaw: which said Trustees, and their successors, shall forever hereafter be, and they are hereby declared to be, one body politic and corporate, with perpetual succession, in deed and in law, to all intents and purposes whatsoever, by the name, style and title of "The Columbian College in the District of Columbia;" by which name and title, they, the said Trustees, and their successors, shall be competent and capable, at law and in equity, to take to themselves and their successors, for the use of the said College, any estate, in any messuage, lands, tenements, hereditaments, goods, chattels, moneys, and other effects, by gift, grant, bargain, sale, conveyance, assurance, will, devise, or bequest, of any person or persons whatsoever: *Provided,* The same do not exceed, in

the whole, the yearly value of twenty-five thousand dollars; and the same messuages, lands, tenements, hereditaments, and estate, real and personal, to grant, bargain, sell, convey, assure, demise, and to farm let, and place out on interest, for the use of the said College, in such manner as to them, or at least nine of them, shall seem most beneficial to the intitution, and to receive the rents, issues, and profits, income and interest, of the same, and to apply the same to the proper use and benefit of the said College: and by the same name to sue, commence, prosecute, and defend, implead and be impleaded, in any courts of law and equity, and in all manner of suits and actions whatsoever, and generally, by and in the same name, to do and transact all and every the business touching or concerning the premises.

SEC. 3. *And be it further enacted*, That the said Trustees shall cause to be made for their use one common seal, with such devices and inscriptions thereon as they shall think proper, under and by which all deeds, diplomas, certificates, and acts of the said College, shall pass and be authenticated; and the same seal, at their pleasure, to break and devise a new one.

SEC. 4. *And be it further enacted*, That the said Trustees, or five of them at least, shall meet at the College, on College Hill, in the said District of Columbia, on the first Monday in March next, for the purpose of concerting and agreeing to such business as, in consequence of this Act, shall be proper to be laid before them at the commencement of the work they have undertaken, and shall have power to adjourn from time to time, as they shall see cause, to any other times or places, for the purpose of perfecting the same. That there shall be a stated meeting of the said Trustees held twice in every year at least, at such place and time as the said Trustees, or a quorum thereof, shall appoint, of which public notice shall be given, after the first meeting, at least twenty days before [the] time of such intended meeting, whenever the President, to be appointed by them, shall deem the business of the institution to require the same, and give due notice thereof, which he is hereby authorized to do; and if, at such stated or occasional meetings, five of the said Trustees shall not be present, those of them who shall be present shall have power to adjourn the meeting to any other day, as fully and effectually, to all intents and purposes, as if the whole number of Trustees for the time being were present; but, if five or more of the said Trustees shall meet at the said appointed times, or at any other time of adjournment, then such five of the said Trustees shall be a board or quorum, and a majority of the votes of them shall be capable of doing and transacting all the business and concerns of the said College not otherwise provided for by this Act; and particularly of making and enacting ordinances for the government of the said College; of electing and appointing the President, Professors, and Tutors, for the said College; of agreeing with them for their salaries and stipends, and removing them for misconduct, or breach of the laws of the institution; of appointing committees of their own body to carry into execution all and every the resolutions of the Board; of appointing a President, Treasurer, Secretary, stewards, managers, and other necessary and customary officers, for taking care of the estate and managing the concerns of the corporation; and, generally, a majority of voices of the board, or quorum of the said Trustees, consisting of five persons at least, at any semi-annual, occasional, or adjourned meeting, after notice given as aforesaid, shall determine all matters and things (although the same be not herein particularly mentioned) which shall occasionally arise, and be incidentally necessary to be determined and transacted by the said Trustees: *Provided always,* That no ordinances shall be of

force which shall be repugnant to this charter, or to the laws of the District of Columbia.

SEC. 5. *And be it further enacted*, That the Head or Chief Master for the said College shall be called and styled "The President," and the Masters thereof shall be called "Professors and Tutors;" but neither President, Professors, or Tutors, while they remain such, shall ever be capable of the office of Trustee.

SEC. 6. *And be it further enacted*, That the President, Professors, and Tutors, or a majority of them, shall be called and styled "The Faculty of the College," which Faculty shall have the power of enforcing the rules and regulations adopted by the Trustees for the government of the pupils, by rewarding or censuring them, and, finally, by suspending such of them who as after repeated admonitions shall continue disobedient and refractory, until a determination of a quorum of the Trustees can be had; and of granting and confirming, by and with the approbation and consent of a board of the Trustees, signified by their mandamus, such degrees in the liberal arts and sciences, to such pupils of the institution, or others, who, by their proficiency in learning, or other meritorious distinction, they shall think entitled to them, as are usually granted and conferred in colleges; and to grant, to such graduates, diplomas or certificates, under their common seal, and signed by the Faculty, to authenticate and perpetuate the memory of such graduation.

SEC. 7. *And be it further enacted*, That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor, or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion.

SEC. 8. *And be it further enacted*, That no misnomer of the said corporation shall defeat or annul any gift, grant, devise, or bequest, to or from the said corporation: *Provided*, The intent of the parties shall sufficiently appear upon the face of the gift, grant, will, or other writing, whereby any estate or interest was intended to pass to or from the said corporation.

SEC. 9. *And be it further enacted*, That the constitution of the said College, herein and hereby declared and established, shall be, and remain, the inviolate constitution of the said College forever; and the same shall not be altered or alterable by any ordinance or law of the said Trustees: *Provided*, That it may be lawful for the Congress of the United States to revoke and repeal this Act, at any and at all times whenever they shall think fit so to do.

SEC. 10. *And be it further enacted*, That it shall be the duty of the said Board of Trustees to keep a regular book or journal, in which shall be entered, under their direction, besides an account of all their ordinary acts and proceedings, all the by-laws, ordinances, rules, and regulations, which may be adopted by the said Board, for their own government, and for the government of the institution; also, a schedule of all the property and effects, real, personal, or mixed, which shall or may be vested in the said Trustees, for the use of the said College, by virtue of any gift, grant, bargain, sale, will, or otherwise, together with annual statements concerning the accounts and finances of the institution. That it shall, moreover, be the duty of the said Trustees, to cause to be enrolled, in the said book or journal, the names of all the contributors to the institution qualified to vote for Trustees, with their respective places of residence; and the said book or journal shall, at all times be open to the inspection or examination of the Attorney General of the United States; and, when required by either House of Congress, it shall be

the duty of said Trustees to furnish information respecting their own conduct, the state of the institution, and of its finances, which shall or may be so required.

SEC. 11. *And be it further enacted,* That in case any vacancy or vacancies shall happen in the Board of Trustees aforesaid by death, inability, resignation, or otherwise, at any time between the stated or triennial elections, that then it shall and may be lawful for the other Trustees, or any five of them, to proceed, at any subsequent meeting after the happening of such vacancy or vacancies, to choose, by ballot, any suitable person or persons to fill the same.

SEC. 12. *And be it further enacted,* That the employment or application of the funds or income of the said corporation, or any part thereof, for any purpose or object other than those expressed and defined in the first section of this Act, or the investment thereof in any other mode than is described and provided in the second section thereof, shall be deemed and taken to be a forfeiture of all the rights and immunities derived from this Act, and the same shall, thenceforth, cease and become null and void.

Approved, February 9, 1821.

By Act of Congress of July 14, 1832, there were donated to the Columbian College Washington city lots to the value of twenty-five thousand dollars; the Act providing that the fund arising from the proceeds of the sale of the lots should constitute an endowment fund for the support of professorships. By Act of February 28, 1839, permission was granted to the College to use seven thousand dollars of the fund for the payment of its debts.

By Act of Congress of February 21, 1871, a form of government by an elected Governor and Legislative Assembly was established for the District of Columbia, and on July 25, 1871, the Legislative Assembly passed the following statute:

An Act for the relief of the Columbian College, in the District of Columbia.

Be it enacted by the Legislative Assembly of the District of Columbia, That the Columbian College, in the District of Columbia, chartered by and organized and acting under the Act of Congress approved February nine, eighteen hundred and twenty-one, may, from the proceeds of any sale of its property, apply such sum as may be needful to pay its present indebtedness and place its libraries, buildings, and apparatus of instruction in good condition, and execute all deeds needful to quiet the title of property already sold.

SEC. 2. *And be it further enacted,* That the Trustees of said College elected in May last shall constitute the corporation of said College until their successors in office shall be chosen and qualified as hereinafter provided, and may, until then, as vacancies occur in their number, temporarily fill them by the election of fit persons residing in the District of Columbia.

SEC. 3. *And be it further enacted,* That the said Trustees shall meet in the Law Building of said College at noon, on the twenty-fifth day of June, eighteen hundred and seventy-two, for the purpose of choosing,

and shall then and there, or at the time and place to which said meeting may be adjourned, elect thirteen Trustees and thirteen Overseers, who shall, upon their election, constitute the College corporation, and they and their successors shall thenceforward be, and be known and recognized as, the Columbian College in the District of Columbia.

SEC. 4. *And be it further enacted,* That the Trustees chosen at the said meeting in June, eighteen hundred and seventy-two, or who may thereafter be chosen, shall be residents of the District of Columbia, and that at said meeting, and at any annual meeting of Trustees and Overseers to be thereafter held in said City of Washington on the Tuesday next preceding the last Wednesday in June, annually, the Trustees and Overseers in convention assembled shall fill vacancies in their Board, and shall, by ballot, elect from among the Trustees two suitable persons, one to be President and the other to be Treasurer and Secretary of said corporation and of the Board of Trustees, and shall establish ordinances and by-laws, or alter or repeal the same; and also frame laws and regulations for the College Faculty and students in all the departments thereof, and by ballot elect such teachers, tutors, professors, lecturers, and President, and with such salaries and duties as said corporation may deem proper.

SEC. 5. *And be it further enacted,* That at said annual meetings not less than seven Trustees and three Overseers shall constitute a quorum for the transaction of any business except adjournment, and adjournment may be made by any number present: *Provided,* That a final adjournment shall not be delayed beyond one week after the time fixed for the annual meeting.

SEC. 6. *And be it further enacted,* That during the interval between said annual meeting the Trustees shall, as now, hold semi-annual, quarterly, monthly, and occasional meetings to fill temporarily, as the case may require, vacancies in the Faculty or in their own Board, and with all their present powers as modified by this Act, subject to the ordinances and by-laws of the corporation; but no real estate or other property of said corporation shall, after the twenty-fifth day of June, eighteen hundred and seventy-two, be disposed of by the Trustees, except by vote of the corporation or in pursuance of its ordinances.

Approved, July 25, 1871.

This Act of the Legislative Assembly of the District was confirmed by Congress in 1873, and by the same statute the College was given the name of "the Columbian University." This Act was as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbia[n] College in the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act to incorporate the Columbia[n] College in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, be, and the same is hereby, so modified that said corporation shall be hereafter known and called by the name of the Columbia[n] University, and in that name shall take, hold and manage all the estate and property now belonging to said College, or that may hereafter be conveyed, devised, or bequeathed to said corporation by its original name; that the restriction

of the yearly value of the property of the said corporation to the sum of twenty-five thousand dollars be, and the said restriction is hereby, repealed; and that said corporation may increase the number of its Overseers to twenty-one, and the number of its Trustees to twenty-one, exclusive of the President of the Faculty, who shall be, *ex officio*, a Trustee of said corporation.

SEC. 2. That the Act for the Relief of the Columbian College in the District of Columbia enacted by the Legislative Assembly of said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be, and the same is hereby, approved and confirmed: *Provided*, That this Act nor the said Act of the Legislative Assembly of the said District, shall be so construed as to authorize the said Columbian University to sell, or use the proceeds of any sale of land granted by Congress to said institution for any purpose other than that expressed in the Act of Incorporation and the Act granting any such land or real estate, or contrary to any will, devise or grant of any land or real estate heretofore or hereafter made, by any person or persons to said institution.

Approved March 3, 1873.

By the Act of Congress of May 31, 1878, it was provided that the annual meeting of the corporation might be held either in May or June, and by the Act of January 14, 1893, it was provided that the Secretary and the Treasurer might be elected from the Trustees or not, as the Board of Trustees might deem proper, and that it should not be necessary that both offices should be held by one person.

In 1898 Congress amended the charter by an Act as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Columbian University, on and after the first day of June, eighteen hundred and ninety-eight, shall be under the management and control of a Board of Trustees, consisting of twenty-two members; the President of the University shall be *ex officio* a member of said Board, and the remaining twenty-one shall be divided into three classes with seven members in each class; a majority of said Board shall be residents of the District of Columbia, and seven members shall constitute a quorum for the transaction of business. That on or before the thirty-first day of May, eighteen hundred and ninety-eight, a meeting of the Trustees and Overseers of said University shall be held, and said meeting shall elect twenty-one Trustees, seven of whom shall be designated to serve from the first day of June, eighteen hundred and ninety-eight, until the annual meeting in eighteen hundred and ninety-nine; and seven from the same date until the annual meeting in nineteen hundred; and seven until the annual meeting in nineteen hundred and one. Two-thirds of said Trustees, and also the President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination; said Trustees so elected shall serve for the periods mentioned and until their successors are elected.

That on the first day of June, eighteen hundred and ninety-eight, the terms of office of the present Trustees and Overseers shall cease and determine, and thereupon the control and management of said University, its property and trusts, shall vest in the Board of Trustees elected as hereinabove provided and their successors.

SEC. 2. That at the annual meeting in eighteen hundred and ninety-nine, and annually thereafter, there shall be elected by the Board of Trustees seven Trustees to fill the places of the class whose terms of office expire; and the Board of Trustees may prescribe in a by-law the mode of nominating persons for election as Trustees. A failure to elect Trustees at the annual meeting shall not create vacancies in the Board, but such election may be had and vacancies occurring during the year may be filled for the unexpired term by the Board at any general or special meeting.

SEC. 3. That the Board of Trustees provided for herein shall have, and they are hereby given, full power and authority to appoint and remove any and all officers, professors, lecturers, teachers, tutors, agents, and employees who are now or may hereafter be elected or appointed; they may, by a vote of two-thirds of all the Trustees constituting said Board, adopt and change by-laws for the conduct of the business and educational work of said University; they may appoint an Executive Committee composed of Trustees, designate the number and Chairman thereof, with such powers and authority as are usually exercised by an Executive Committee, and which shall be conferred by the Board, subject always to the control of the Board of Trustees; they may create and establish schools and departments of learning to be connected with and become a part of said University; they may receive, invest, and administer endowments and gifts of money and property for the maintenance of educational work by said University, and by any department and chair thereof now established or which may hereafter be created or established by said University; and they shall have all the powers and authority heretofore granted to and vested in the Trustees and Overseers of said University.

SEC. 4. That the annual meeting of the Board of Trustees shall be held in the City of Washington, District of Columbia, on the Wednesday nearest the first day of June in each year; two other stated meetings shall be held on the second Wednesday of October and January in each year, and special meetings may be called by the President of the University or by the Executive Committee or by seven members of the Board of Trustees upon such notice and at such hour and place as may be designated in the by-laws; at all meetings any business necessary to be transacted may be considered and acted upon, and any meeting may be adjourned from time to time by the Trustees present, whether constituting a quorum or not, notice of such adjournment to be given, as of called meetings, to those Trustees not present.

SEC. 5. That the terms of office of the President of the University, the Treasurer and other officers, professors, and lecturers, and the employment of agents and employees, and the title to all the property and rights in and management of the endowment funds of the University shall not be affected by the change of management herein provided for, but they shall continue and be subject to the control and management of the Board of Trustees hereby created the same as they are now subject to the control and management of the corporation.

SEC. 6. That all acts and parts of acts inconsistent with the provisions of this Act are hereby repealed.

Approved, March 18, 1898.

In 1904 Congress passed an Act restoring the non-denominational character of the institution and permitting the change of its name. This Act and the certificate of change of name were as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act to incorporate the Columbian College, in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, and the amendatory Act approved March eighteenth, eighteen hundred and ninety-eight, be and the same are hereby, amended by repealing and striking out of the said charter the following words in lines twenty to twenty-five in section one of the said amendatory Act of March eighteenth, eighteen hundred and ninety-eight, namely, "Two-thirds of said Trustees, and also the President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination."

SEC. 2. That section thirteen of the original charter of February ninth, eighteen hundred and twenty-one, which provides "That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion," be, and the same is hereby, re-enacted and shall be hereafter in full force as a part of said charter.

SEC. 3. That power is hereby given to the Board of Trustees of said University to change the name of said University at any regular meeting by a vote of not less than two-thirds of the total number of members of the Board, as prescribed by the charter, subject to the approval of the Secretary of the Interior and the Commissioner of Education. That upon said action being taken a certificate, under the seal of the University, stating the name adopted and the date when the name shall go into effect not less than thirty days nor more than six months from the date of its adoption, together with the fact that said name has been adopted as herein prescribed, shall be filed in the office of the Recorder of Deeds of the District of Columbia, and thereupon, upon the date specified for the name to go into effect, the University shall be known and designated by the name adopted, and by said new name the said University shall be vested with and convey its real estate, hold, control, and administer endowments and gifts of money and property heretofore and hereafter made for the maintenance of its educational work, and do and perform all acts which it now has the power to do under its said charter. Such change of name shall not in any other way change, affect, or modify in any degree the rights, privileges, obligations, and powers of the said University under the charter of February ninth, eighteen hundred and twenty-one, and the amendatory Acts thereto.

SEC. 4. That all Acts and parts of Acts inconsistent with this Act are hereby repealed.

Approved, January 23, 1904.

Certificate of Change of Name of the Columbian University to "The George Washington University."

DISTRICT OF COLUMBIA,
City of Washington:

The Columbian University, in accordance with the Act of Congress approved January 23, 1904, does hereby certify that, at the regular meeting of its Board of Trustees, duly held on the eighth day of June, 1904, at which meeting there were present more than two-thirds of the total number of members of the Board, it was unanimously resolved that, subject to the approval of the Secretary of the Interior and the Commissioner of Education, prescribed by said Act of Congress, the name of this University be changed to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904.

And it is hereby further certified, that on the twentieth day of June, A. D. 1904, the Secretary of the Interior and the Commissioner of Education duly approved in writing said change of name, which said written approval is hereto attached and made a part hereof.

In testimony whereof, said Columbian University has given this its certificate under its corporate seal, at the City of Washington, D. C., on the twenty-first day of June, A. D. 1904.

CHARLES W. NEEDHAM,
President.

Attest:
JOHN B. LARNER,
Secretary.

(Corporate Seal.)

UNITED STATES OF AMERICA,
DEPARTMENT OF THE INTERIOR,
WASHINGTON, D. C., *June* 20, 1904.

Pursuant to section 882 of the Revised Statutes, I hereby certify that the annexed paper is a true copy of the original as it appears upon the files of the Department.

In testimony whereof, I have hereunto subscribed my name, and caused the seal of the Department of the Interior to be affixed, the day and year first above written.

E. A. HITCHCOCK,
Secretary of the Interior.
W. B. A.

(Seal of the Department of the Interior.)

Whereas by Act of Congress approved January 23, 1904, the Columbian University was authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education;

And whereas it has been made satisfactorily to appear to us that, at the regular meeting of the Board of Trustees of said University, held on the eighth day of June, A. D. 1904, at which meeting there were present more than two-thirds of the total number of members of said Board, it was unanimously resolved to change the name of said University to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904;

Now, therefore, this is to witness that, pursuant to said Act of Congress, we do hereby, this twentieth day of June, A. D. 1904, approve said change of name.

E. A. HITCHCOCK,
Secretary of the Interior
W. T. HARRIS,
Commissioner of Education.

(Seal of the Department of the Interior.)

In 1905 a further amendment to the charter was made, as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That The George Washington University shall have, and is hereby given, power to increase the number of its Trustees from time to time, by a two-thirds vote of the whole number of the Trustees at the time such vote is taken, to a number not exceeding forty-five. In case of the increase of the number of Trustees a certificate, stating the number of the Board and the time when it shall go into effect and that the action so taken was by two-thirds vote as required by this Act, shall be filed with the Recorder of Deeds of the District of Columbia, and upon and after the date named the Board shall consist of the number of Trustees, stated in such certificate, and said Board may also appoint a Board or Boards of Visitors for any department or departments of educational work carried on by the University, such Boards of Visitors to be advisory only.

SEC. 2. That by and with the consent of said University, Colleges may be organized hereunder for the purpose of carrying on, in connection with the University, special lines of educational work in the arts, sciences, and liberal and technical knowledge, such Colleges to be educationally a part of the system of the University, but upon independent financial foundations, and to this end any five or more persons desirous of associating themselves for the purpose of establishing a College hereunder, may make, sign, and acknowledge before any officer authorized to take acknowledgement of deeds in the District of Columbia, and with the assent of the University in writing, file in the office of the Recorder of Deeds of the said District a certificate in writing, in which shall be stated: First, the intention to organize a corporation under this Act and the assent of the University thereto; second, the name or title by which the College shall be known in law; third, the names of the Trustees constituting the first Board, and such Trustees may be divided into three classes, the term of office of one class expiring annually; fourth, the manner of nominating and electing successors to said Trustees; fifth, the branch or branches of literature, arts, sciences, liberal or technical knowledge proposed to be taught; sixth, that the highest officer of said College shall be a Dean, the Dean and members of the Faculty to be members of the Educational Councils of the University in accordance with the rules governing the University; seventh, that all degrees shall be bestowed by the University; eight, that in all financial and legal responsibility the College shall be an independent organization. Upon filing such cer-

tificate the Trustees named therein and their successors shall be a body politic, incorporated by the name and style stated in the certificate, and by that name and style shall have perpetual succession in association with the University, with power in the College to sue and be sued; plead and be impleaded; to acquire, hold, and convey property in all legal ways; to receive by gift, devise, or otherwise, and hold, control, and administer endowments and gifts of money and property thereafter made to it for the maintenance of its educational work; to have and use a common seal, and to alter and change the same at pleasure; to make and alter from time to time such by-laws, not inconsistent with the Constitution of the United States or the laws in force in said District or the laws of the University regulating the conduct of educational work, as may be deemed necessary for the government of the College, but said College shall not confer academic or honorary degrees; such College shall hold the property of the institution and all moneys and property conveyed to it by purchase, gift, conveyance, will, devise, or bequest solely for the purposes of the educational work specified in said certificate; the Trustees of such College shall faithfully apply all funds collected or received and the proceeds thereof belonging to the institution, according to their best judgment, in purchasing lands and erecting buildings, supporting necessary officers, instructors, and servants, and procuring all equipment, educational and otherwise, necessary to carry on the work of the College.

SEC. 3. That said University may enter into affiliated agreements with any institutions of learning outside of the District of Columbia, for the purpose of giving to students of such institutions the educational facilities of said University and the Departments of the Government in the City of Washington which are by law open to students, upon such terms as are mutually agreed upon by the said University and the affiliated institutions.

Approved, March 3, 1905.

Under section 2 of the Act of 1905, there now exist two colleges which are doing special educational work and which are in active operation—the National College of Pharmacy, organized in 1905, and the College of Veterinary Medicine, organized in 1908. The financial affairs of these Colleges are separate from those of the University, and are managed by their separate Boards of Trustees. The Faculties of these Colleges are also appointed by their respective Boards of Trustees. The connection between these Colleges and the University consists in the fact that their Deans are members of the President's Council, and that the Board of Trustees of the University confers degrees for the work done in these Colleges.

By resolutions of the Board of Trustees of the University of May 6, 1909, and January 12, 1910, provision was made for the nomination by the Alumni of two Alumni Trustees each year. In the spring of 1910, this plan was put in operation, and since then the two persons nominated as Alumni Trustees have been elected to membership on the Board.

BY-LAWS OF THE GEORGE WASHINGTON UNIVERSITY.

ARTICLE I.

The President of the University.

SECTION 1. The President of the University shall hold office without limit of time, until his resignation be accepted, or he be removed from office by the Board of Trustees; he shall be the executive head of the University and of all its departments, exercising such supervision, direction, and control as will promote the efficiency of every department; he shall be responsible, under the supervision of the Board of Trustees, for the discipline of the University; he shall preside at the meetings of the Faculties, and be the official medium of communication between the Faculties and the Board of Trustees, and between the students of the University and the Board of Trustees; he shall recommend to the Board of Trustees appointments to the several Faculties; he shall be responsible for carrying out such measures concerning the internal administration of the University as the Board of Trustees may enact. He shall make a yearly report to the Board of Trustees at the January meeting concerning the state of the University. He shall control the expenditure and administration of the yearly budget when formally adopted by the Board of Trustees.

ARTICLE II.

Board of Trustees.

SECTION 1. No member of the teaching staff of the University except the President of the University, or of the teaching staff of any college incorporated under the charter of the University, while he remains such, shall be capable of holding the office of Trustee of the University.

SEC. 2. At the annual meeting of the Board after the election of Trustees, the Board shall elect by ballot from among their number a Chairman and Vice-Chairman of the Board to serve until the next annual meeting and until their successors are elected and qualified. The Chairman of the Board, and in his absence the Vice-Chairman, shall preside at all meetings of the Board of Trustees.

SEC. 3. At the annual meeting after the election of Trustees the Board shall elect by ballot the following officers, to serve until the next annual meeting and until their successors are elected and qualified: a Secretary, a Treasurer, an Auditor, and a Counsel of the University.

SEC. 4. In the event of a failure for any reason so to elect either or all of the said officers, or in case of any vacancy from any cause, then an election may be held for the unexpired term at a meeting called for that purpose.

SEC. 5. The annual meeting of the Board of Trustees shall take place on the Wednesday nearest the first day of June of each year.

SEC. 6. Stated meetings of the Board shall be held on the second Wednesdays of October and January.

SEC. 7. Notice of all stated meetings shall be mailed by the Secretary of the University to each member of the Board at least five days previous to the time of such meetings.

SEC. 8. Special meetings may be called at any time by the President of the University, the Executive Committee, or by seven members of the Board of Trustees. The Secretary shall issue the notices of such meetings.

SEC. 9. The call for special meetings shall state the nature of the business to be considered, and shall be mailed at least two days before the meeting is to be held.

SEC. 10. Seven members of the Board of Trustees shall constitute a quorum for the transaction of any business.

ARTICLE III.

Executive Committee.

SECTION 1. There shall be an executive committee of seven members of the Board of Trustees, of which the President of the University shall be a member *ex officio*. The other members of the committee shall be elected by ballot at the annual meeting, and shall serve until their successors are elected. The Board shall designate one of the members of the Committee to act as Chairman.

SEC. 2. In case of inability to act on the part of any member of the Committee his place may be filled by the Board of Trustees.

SEC. 3. Four members of the Committee shall constitute a quorum for the transaction of business.

SEC. 4. The Committee is authorized to transact such business as may require attention between the regular meetings of the Board of Trustees; but the Chairman of the Committee shall make a report at each stated meeting of the Board on the proceedings of the Committee during the intervening period, and at any meeting of the Board, if any

member of the Board shall request that the report of the proceedings of any meeting or meetings of the Committee be read, the same shall be read by the Secretary.

SEC. 5. Regular meetings of the Committee shall be held during the academic year monthly, on the second Tuesday of the month, and special meetings may be called by the Secretary whenever requested by the Chairman or any two members of the Committee.

SEC. 6. In case of inability to act on the part of the Chairman of the Committee, the Committee may appoint a temporary chairman for the meeting.

ARTICLE IV.

Chairman of the Executive Committee.

SECTION 1. It shall be the duty of the Chairman of the Executive Committee to have the superintendence of the business affairs of the corporation and to keep the Executive Committee and the Board of Trustees informed concerning the same, and to see that all matters of business relating to the corporation are regularly presented to the Executive Committee and the Board for action.

ARTICLE V.

Standing Committees.

SECTION 1. At the annual meetings there shall be appointed a Committee of three members for each school or department of the University, who shall visit and inspect the conditions and conduct of the school or department and make a written report thereon to the stated meetings of the Board of Trustees.

SEC. 2. Provisional appointments to any Faculty may be made by the President after consideration of the nomination of the Dean of the Faculty, and, with the approval of the committee of the school immediately concerned, the appointment to hold good until the next meeting of the Board or of the Executive Committee.

ARTICLE VI.

The Secretary of the University.

SECTION 1. The Secretary of the University shall as such attend and keep minutes of all meetings of the Board of Trustees, the Executive

Committee, the educational council and faculties, as may by resolution of the Board be required to keep records. He shall give to any meeting at which he is entitled to be present any information concerning University affairs which he may have and which may be proper to be brought before such meeting. He shall have the custody of all the files and records of the University proper to his office; he shall have the custody of the corporate seal of the University, and shall affix it to corporate acts authorized by the Board of Trustees or the Executive Committee, and he shall generally do and perform such administrative duties as may be assigned him by the President from time to time not inconsistent with the by-laws.

ARTICLE VII.

The Treasurer of the University.

SECTION 1. The Treasurer shall give a bond or shall be bonded in a surety company, at the expense of the University, for the faithful performance of his duties in such sum and with such sureties as shall be approved by the Board of Trustees.

SEC. 2. He shall keep all the funds of the University in such bank or banks as the Board of Trustees shall designate; he shall keep the trust funds, and the full account thereof, separate from the current or general funds and accounts of the University; he shall make monthly statements, showing the current financial operations and the condition of the trust funds and other invested funds to the Executive Committee; he shall make a full report annually to the Board of Trustees as specified in Article XI, and he shall at such other times make such reports as the Trustees may require.

SEC. 3. He shall make payments only by checks upon the bank countersigned by the President of the University, or in his absence by the Secretary, and only for investments, salaries, bills, and expenses authorized by the Board of Trustees or the Executive Committee, provided, however, that when the Treasurer is absent or incapacitated, or when the office of Treasurer is vacant, or when the President and Secretary are both absent or incapacitated, or in any other emergency, the Executive Committee may by resolution make special and temporary arrangements for the signing or countersigning of checks.

ARTICLE VIII.

The Auditor of the University.

SECTION 1. The Auditor of the University shall make three audits each year of the books and accounts of the Treasurer. The fiscal year

shall end at midnight on August 31st of each year, and the accounts shall be audited as of December 31st, April 30th, and August 31st at midnight.

SEC. 2. A corporation may be elected by the Board of Trustees as the Auditor of the University.

ARTICLE IX.

The Counsel of the University.

SECTION 1. The Counsel of the University shall render opinions to the President, the Board of Trustees, or to the Executive Committee, when requested, upon legal questions arising in the management of the educational or business affairs of the University, and shall represent the University in all legal proceedings prosecuted by or against the University. The Counsel of the University may be a member of the Board of Trustees.

ARTICLE X.

Committee on Catalogue.

SECTION 1. In June of each year the annual catalogue of the University shall be prepared by a committee consisting of the President of the University as Chairman, the Secretary of the University, and three members of the Faculty of the University appointed by the President. The Catalogue shall be published annually in pamphlet form. Each annual catalogue shall contain the charter and by-laws of the University.

ARTICLE XI.

Annual Financial Report.

SECTION 1. Between July 1st and October 1st in each year there shall be prepared by the Treasurer a financial report showing in detail the financial condition of the University during the previous year, which financial report shall be certified by the Auditor to be correct. This report shall be filed with the Secretary on or before October 1st, and shall be laid before the Board of Trustees at their October meeting, and when approved by the Board of Trustees shall, with any modifications ordered by them and assented to by the Treasurer and Auditor, be printed by the University in pamphlet form.

ARTICLE XII.

Sale of Land and Other Assets.

SECTION 1. Real estate and other securities of the University shall not be sold or disposed of except by direction of the Board of Trustees,

SEC. 2. All deeds and conveyances of real estate belonging to the University shall be signed by the President of the University and the Secretary, and the same shall be acknowledged, attested, and the seal of the University attached thereto by the Secretary.

ARTICLE XIII.

Amendments.

SECTION 1. These by-laws may be amended or repealed at any meeting of the Board by a vote of the majority of all members of the Board, provided notice of the proposed amendment or change has been sent to each member of the Board at least five days before the meeting.

ARTICLE XIV.

Former By-Laws Repealed.

SECTION 1. All by-laws heretofore enacted are hereby repealed.

ORDINANCE.

ARTICLE I.—*Organization.*

SECTION 1. The educational work of the University shall be divided into departments, and again subdivided into colleges or schools. The departments, colleges, and schools forming an integral part of the University are as follows: The Department of Arts and Sciences, comprehending the School of Graduate Studies, Columbian College, the College of Engineering and Mechanic Arts, the College of the Political Sciences, the Teachers College; the Department of Law; the Department of Medicine; the Department of Dentistry. These departments, colleges, and schools are subject to the Board of Trustees represented by the President of the University, and unless otherwise noted, to the rules and regulations herein set forth.

SEC. 2. Associated colleges organized in accordance with the charter of the University on independent financial foundations are under the immediate control of their respective Boards of Trustees, subject in educational matters to the authority of the President and the Univer-

sity Board of Trustees. The National College of Pharmacy and the College of Veterinary Medicine are such associated colleges.

SEC. 3. The Department of Medicine, including the School of Medicine and the University Hospital, and the Department of Dentistry are organized under special ordinances of the Board of Trustees, and are subject to the rules and regulations of this ordinance only where the special ordinances governing them do not conflict with this ordinance.

ARTICLE II.—*Faculties.*

SECTION 1. Each department, college, and school shall be under the immediate charge of a faculty subject to the authority of the President's Council. The faculties shall recommend to the Board of Trustees candidates for degrees, diplomas, certificates, and awards.

SEC. 2. Each faculty shall be composed of all the Professors, Assistant Professors, and Instructors who teach in the department, school, or college under the charge of that faculty, and of such other members as the faculty may, on the recommendation of the Dean, with the approval of the President, admit to membership. The President shall be *ex officio* a member of each faculty, and the Secretary shall *ex officio* have voice at all faculty meetings, but no vote.

SEC. 3. A faculty may, at its discretion, delegate any of its purely administrative powers to an executive committee of which a Dean shall be Chairman, the members of which shall be nominated by that Dean and appointed by the President. Every executive committee shall be subject to the authority of the faculty from which it is appointed.

ARTICLE III.—*President's Council.*

SECTION 1. The President's Council shall have charge of all administrative educational questions, subject to the confirmation of the Board of Trustees.

SEC. 2. The President's Council shall be responsible for the co-ordination of work throughout the University and shall have immediate jurisdiction over every administrative educational question touching the interests of more than one department, college, or school.

SEC. 3. The President's Council shall be composed of the President of the University, the Secretary of the University, and of all the Deans in the University, *ex officio*, and of a representative or representatives from each department, college, and school of the University to be elected annually by the faculties of the respective departments, colleges, and schools; those departments, colleges, and schools with a registration of less than two hundred students having one representative, those with more than two hundred students having two representatives.

ARTICLE IV.—*Deans.*

SECTION 1. The Dean of each department, college, or school shall be appointed by the Board of Trustees from among the members of its faculty. The Dean shall, under the President, be the chief executive officer of his department, college, or school. As such he shall have authority in his department, college, or school to enforce such regulations as may be imposed by the Board of Trustees or the Faculty. He shall be held responsible for the proper preparation and conduct of the business of his department, college, or school, and for the performance of such administrative duties as pertain to his office and may be required of him by the President. He shall make annual written reports to the President.

ARTICLE V.—*Titles of the Teaching Staff.*

SECTION 1. The academic titles of those engaged in teaching shall be Professor, Assistant Professor, Instructor, Assistant, Demonstrator, and Lecturer. The word "Associate" may be prefixed to any title where, under the terms of this ordinance, it is appropriate, and in the Department of Medicine this title may be used as provided in the special ordinances governing that department.

ARTICLE VI.—*Appointments.*

SECTION 1. Instructors, Assistants, Demonstrators, and Lecturers shall, in the absence of agreement to the contrary, be appointed annually, with such compensation as shall be fixed by the Board of Trustees at the time of the appointment.

SEC. 2. Assistant Professors shall not be appointed for more than three years, subject to removal in accordance with the provisions of the charter of the University, and shall serve as Assistant Professors for at least three years before being eligible for promotion to a professorship.

SEC. 3. Professors shall be appointed without limit of time, subject to removal in accordance with the provisions of the charter of the University.

ARTICLE VII.—*Academic Year.*

SECTION 1. The academic year shall begin on the last Wednesday of September, and shall end on the Wednesday following the annual meeting of the Board of Trustees.

THE BOARD OF TRUSTEES.

CHARLES HERBERT STOCKTON, LL.D.,
President of the University.

1913.

HENRY GUSTAV BEYER, M.D., Ph.D., 1725 H Street.
ALDIS BIRDSEY BROWNE, LL.B., 1419 F Street, N. W.
ARCHIBALD HOPKINS, A.M., LL.B., 1826 Massachusetts Avenue, N. W.
THOMAS SNELL HOPKINS, L.B., Hibbs Building.
*WILLIAM BRUCE KING, A.M., LL.M., 1708 S Street, N. W.
*AUGUSTUS STORRS WORTHINGTON, LL.B., 416 Fifth Street, N. W.

1914.

*HARRY CASSELL DAVIS, A.M., L.H.D., 1006 Massachusetts Avenue, N. W.
WILLIAM JAMES FLATHER, Riggs National Bank.
WILLIAM DAVID HOOVER, LL.M., National Savings & Trust Company.
*JOHN BELL LARNER, LL.B., LL.D., 900 F Street, N. W.
HENRY BROWN FLOYD MACFARLAND, 1420 New York Avenue, N. W.
WILLIAM HENRY SINGLETON, A.B., 2020 H Street, N. W.

1915.

GIST BLAIR, A.B., LL.B., Union Trust Building.
ABRAHAM LISNER, 1723 Massachusetts Avenue, N. W.
WILLIAM ANDREW MEARNS, LL.M., 2301 S Street.
*THEODORE WILLIAMS NOYES, A.M., LL.M.,
1101 Pennsylvania Avenue, N. W.
HENRY CLEVELAND PERKINS, 1701 Connecticut Avenue, N. W.
*ALEXANDER TAIT STUART, A.M., The Wyoming.
MAXWELL VAN ZANDT WOODHULL, A.M., 2033 G Street.

* Nominated by the Alumni.

Chairman of the Board of Trustees.

JOHN BELL LARNER.

Vice-Chairman of the Board of Trustees.

ARCHIBALD HOPKINS.

Standing Committees of the Board of Trustees.

Executive: Davis, Flather, A. Hopkins, Lisner, Singleton, Stockton, Woodhull.
Auditing: Flather, Mearns, Hoover.
Degrees: Stockton, Beyer, A. Hopkins, Macfarland.
Subscriptions and Endowments: Lisner, Macfarland, Perkins, Flather, Woodhull.
Columbian College: Singleton, Davis, King.
Engineering: Perkins, Woodhull.
Political Science: A. Hopkins, King, Browne.
Graduate School and Teachers College: Stuart, Blair.
Law: Larner, Worthington, Macfarland.
Medicine, Dentistry, and the Hospital: Beyer, Larner, T. S. Hopkins.
Associated Colleges: T. S. Hopkins, Browne, Noyes.

RICHARD COBB, *Secretary of the University.*
CHARLES WENDELL HOLMES, *Treasurer of the University.*
AMERICAN AUDIT COMPANY, *Auditor of the University.*

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HENRY E. KALUSOWSKI, Phar.D.....Dean of the National College of Pharmacy
DAVID EASTBURN BUCKINGHAM, V.M.D.....Dean of the College of Veterinary Medicine

COMMITTEES OF THE PRESIDENT'S COUNCIL.

Catalogue and Other Publications: The President, the Secretary, Professors Hodgkins, Willis, and Wilbur.
Admissions: Professors Wilbur, Munroe, and Hough.
Schedule: Professors Henning, Mechlin, and Ruediger.
Library: Professors Hough, Kern, the Librarian.
Student Organizations: Professors Ruediger, Henning, and ———.
Debating: Professor Veditz; Messrs. W. E. Calley, and W. R. Fitch.

UNIVERSITY MEMBERS OF FACULTIES AND TEACHING STAFF.*

(Arranged with the exception of the President, in groups, in the order of appointment.)

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY

Professors.

J. FORD THOMPSON, M.D.....Professor of Surgery, Emeritus
ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D....Professor of Obstetrics, and Dean Emeritus of the Faculty of Medicine
THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D....Professor of Zoology, Emeritus
GEORGE NICHOLAS ACKER, A.M., M.D.....Professor of Pediatrics and Clinical Professor of Medicine
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*NOTE.—In many instances members of the Teaching Staff give only part time to the University. For the names of the members of the Faculties and Teaching Staff of the Associated Colleges, see Part III of this catalogue.

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JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
JOHN ROLAND WALTON, D.D.S.....Dean of the Dental School and Professor of Prosthetic Dentistry and Orthodontia
WILLIAM ALANSON WHITE, M.D.....Professor of Psychiatry, and Clinical Professor of Neurology
CHARLES WILLIAM AUGUST VEDITZ, LL.B., Ph.D..Acting Dean of the College of the Political Sciences, Professor of Sociology
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ASAPH HALL, JR., Ph.D.....Professor of Astronomy
ARTHUR AUGUSTIN SNYDER, M.D.....Clinical Professor of Surgery
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SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology
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(*Absent during* 1912-13.)
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FREDERICK FULLER RUSSELL, M.D.....Professor of Pathology and Bacteriology
BUCKNER MAGILL RANDOLPH, M.D....Professor of Materia Medica and Therapeutics
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LOUIS ANATOLE LA GARDE, M.D.....Professor of Military Surgery
THOMAS MALCOLM PRICE, Ph.D..Professor of Physiological Chemistry
WILLIAM CARL RUEDIGER, Ph.D..Professor of Educational Psychology
ALFRED FRANCIS WILLIAM SCHMIDT, A.M..Librarian and Professor of German

WILLIS LUTHER MOORE, Sc.D., LL.D.....Professor of Practical Meteorology
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GIDEON BROWN MILLER, S.B., M.D....Clinical Professor of Gynecology
MATTHEW KOLLIG, A.B., M.D.....Professor of Anatomy
JULIAN MAYO CABELL, M.D.....Clinical Professor of Obstetrics

Associate Professors.

JOHN ROBERT DE FARGES, D.D.S.....Associate Professor of Dental Metallurgy, Economics, Jurisprudence, and Ethics
HURON WILLIS LAWSON, S.M., M.D.....Associate Professor of Obstetrics and Associate Obstetrician in Chief to the University Hospital and Dispensary
D. DE WITT BEEKMAN, D.D.S..Associate Professor of Materia Medica and Therapeutics
FRANK ADELBERT HORNADAY, S. B., M.D.....Associate Professor of Chemistry
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JAMES DUDLEY MORGAN, A.B., M.D...Associate Professor of Medicine, and Clinical Professor of Medicine
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NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry
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MERTON LEROY FERSON, A.M., LL.B.....Assistant Professor of Law
LESLIE CLEVELAND MCNEMAR, A.B.....Assistant Professor of International Law

Associates, Lecturers, Instructors, Demonstrators, and Assistants.

JOHN BENJAMIN NICHOLS, M.D....Associate in Medicine and Dietetics
EDWARD EMORY MORSE, M.D.....Associate in Obstetrics
HARRY HAMPTON DONNALLY, A.M., M.D....Associate in Medicine and Clinical Associate in Pediatrics
WILLIAM FRANCIS MATTINGLY SOWERS, A.B., M.D..Associate in Surgery
HENRY RANDALL ELLIOTT, M.D.....Associate in Physiology and Pharmacology
WILBUR R. BRANDENBURG, M.D.....Associate in Bacteriology and Pathology
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JOHN T. KELLEY, M.D.....Clinical Associate in Obstetrics
WALTER ASHBY FRANKLAND, M.D.....Clinical Associate in Medicine
J. LEWIS RIGGLES, M.D.....Associate in Anatomy and Gynecology
HENRY JAMES NICHOLS, M.D..Associate in Bacteriology and Pathology
WALTER WATKINS WILKERSON, M.D.....Associate in Medicine
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MARK FLORUS FINLEY, D.D.S.....Clinical Instructor in Orthodontia
ALEXANDER DUNNINGTON COBEY, D.D.S.....Clinical Instructor in Non-Cohesive Gold
GEORGE MILLER SHARP, D.D.S.....Lecturer on Oral Prophylaxis
Z. WILBUR ALDERMAN, D.D.S.....Clinical Instructor in Electro-Therapeutics
ROBERT EDWIN LAYTON, D.D.S.....Clinical Instructor in Dentistry
CHARLES CLARK AMMERMAN, M.D.....Assistant in Ophthalmology to the Dispensary
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ALTON LEWIN KIBLER, Ph.D.....Instructor in Chemistry
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CHARLES EDWARD VAN OSTRAND, S.M.....Lecturer on Mechanics
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CLEMENT LAYTON BOUVE, A.B.....Lecturer on Diplomacy
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WALTER EDGAR HANCOCK, A.B.....Assistant in Spanish
GEORGE TRAVER HARRINGTON, B.S.....Assistant in Botany
HAROLD KEATS, A.B.....Assistant in History

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The University comprises:

THE DEPARTMENT OF ARTS AND SCIENCES.

The School of Graduate Studies.
Columbian College.
The College of Engineering and Mechanic Arts.
The College of the Political Sciences.
The Teachers College.

THE PROFESSIONAL DEPARTMENTS.

The Department of Law.
The Department of Medicine.
The Department of Dentistry.

THE ASSOCIATED COLLEGES.

National College of Pharmacy.
The College of Veterinary Medicine.

ANNUAL COMMENCEMENT.

The Annual Commencement is held on the Wednesday following the Wednesday nearest the first day of June. Students who have satisfied the requirements for degrees subsequent to the June Commencement may be awarded such degrees privately in October or February.

THE UNIVERSITY LIBRARY.

The University Library comprises (1) the Library of the Department of Arts and Sciences, (2) the Law Library, (3) the Medical Library, and (4) the Library of the College of the Political Sciences. It contains over 44,500 volumes.

In addition to its general collections the Library of the Department of Arts and Sciences contains the library of the late Professor Richard Heinzel, of the University of Vienna, containing 7,200 books and pamphlets in Germanic philology and literature, and cognate branches; the library of the late Professor Curt Wachsmuth, of the University of Leipzig, containing 7,900 books and pamphlets in Greek and Roman literature, archaeology, and history; and the divisional collections in engineering and mechanic arts and in education. It is open from 9 a. m. to 10 p. m.

The Law Library, containing 5,500 volumes, is open from 9 a. m. to 10 p. m.

The Medical Library, containing 3,000 volumes, is open from 9 a. m. to 10.30 p. m.

The Library of the College of the Political Sciences, containing 4,000 volumes in political history, international law, and the social sciences, is open from 9 a. m. to 10 p. m.

PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS.

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.
5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."

PART II
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MITCHELL CARROLL, Ph.D..Professor of Greek and the History of Art

PAUL BARTSCH, Ph.D.....Professor of Zoology

GEORGE NEELY HENNING, A.M.....Professor of Romance Languages

CHARLES WILLIAM AUGUST VEDITZ, LL. B., Ph.D...Acting Dean of the College of the Political Sciences and Professor of Sociology

WILLISTON SAMUEL HOUGH, Ph.M....Dean of Teachers College and Professor of Philosophy

GEORGE MILLER STERNBERG, M.D., LL.D., Professor of Preventive Medicine

ASAPH HALL, JR., Ph.D.....Professor of Astronomy

ALBERT MANN, A.M., Ph.D.....Professor of Botany

HENRY PARKER WILLIS, Ph.D....Dean of the College of the Political Sciences and Professor of Economics and Finance (Absent during 1912-13.)

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FREDERICK FULLER RUSSELL, M.D.....Professor of Pathology and Bacteriology

THOMAS MALCOLM PRICE, Ph.D..Professor of Physiological Chemistry

WILLIAM CARL RUEDIGER, Ph.D..Professor of Educational Psychology

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WILLIAM JACKSON HUMPHREYS, C.E., Ph.D.....Professor of Meteorological Physics
CHARLES NOBLE GREGORY, A.M., LL.D.....Professor of Law
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RAY SMITH BASSLER, Ph.D.....Assistant Professor of Geology
PERLEY GILMAN NUTTING, Ph.D.....Assistant Professor of Physics
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HIRAM COLVER MCNEIL, Ph.D.....Assistant Professor of Physical Chemistry
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LESLIE CLEVELAND MCNEMAR, A.B.....Assistant Professor of International Law
OSCAR PHELPS AUSTIN.....Lecturer on Commercial Geography
FREDERICK EUGENE FOWLE, JR., S.B.....Lecturer on Astro-Physics
WILLIAM HAMILTON, Ph.D.....Lecturer on History
WILLIAM STANTON SMALL, Ph.D.....Lecturer on Education
STEPHEN ELLIOTT KRAMER, B.S., A.M.....Lecturer on Education
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PAUL CHARLTON, A.B.....Lecturer on Colonial Administration
JOHN LEE COULTER, A.M.....Lecturer on Agricultural Economics
EDWIN WILEY, Ph.D.....Lecturer on English
JESSE E. POPE, Ph.D.....Lecturer on Agricultural Economics
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JOSEPH PLASS, A.M.....Instructor in History

HARRY GRANT HODGKINS, A.B.....Instructor in Mathematics
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CHARLES EDWIN VAN OSTRAND, S.M.....Lecturer on Mechanics
HARVEY LINCOLN CURTIS, Ph.D.....Lecturer on Physics
CLEMENT LAYTON BOUVÉ, A.B.....Lecturer on Diplomacy
FLETCHER BASCOM DRESSLAR, Ph.D.....Lecturer on Education

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President Stockton, Dean Munroe, Professors Hodgkins, Schoenfeld, Gill, Clarke, Wiley, Merrill, Swisher, Wilbur, Henning, Bartsch, Veditz, Hough, Carroll, Sternberg, Hall, Mann, Smith, Ruediger, Schmidt, Moore, Humphreys, Price; Assistant Professor Hopkins, Hill, Dunstan, Mechlin, Nutting, Bassler, Mortimer, McNeil, Alden, Kern, Curtis; Messrs. E. Wiley, Van Ostrand.

Faculty of Columbian College.

President Stockton, Dean Wilbur, Professors Hodgkins, Schoenfeld, Munroe, Merrill, Swisher, Bartsch, Henning, Veditz, Hough, Smith, Schmidt; Assistant Professors Bassler, Sweet, Kern, Moore, Mr. Woodward, Miss Macmillan.

Faculty of College of Engineering and Mechanic Arts.

President Stockton, Dean Hodgkins, Professors Schoenfeld, Munroe, Merrill, Wilbur, Henning, Schmidt; Assistant Professors Dunstan, Mechlin, Swett, Starr, Mortimer, Latimer; Messrs. Gordon, Morse, Woodward.

Faculty of College of the Political Sciences.

President Stockton, Acting Dean Veditz, Professors Swisher, Hodgkins, Schoenfeld, Munroe, Wilbur, Henning, Hough, Smith, Gregory; Assistant Professors Moore, Latimer, Kern; Messrs. McNemar, Poole, Churchill, Osborne, Austin, Coulter, Pope, Paulin, Lauck.

Faculty of Teachers College.

President Stockton, Dean Hough, Professors Hodgkins, Wilbur Swisher, Bartsch, Smith, Ruediger, Schmidt; Assistant Professors Moore, Kern; Messrs. Small, Kramer, Dresslar.

SCHOOL OF GRADUATE STUDIES.

HIGHER DEGREES.

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A.M), Master of Science (M.S.), Civil Engineer (C.E.), Electrical Engineer (E.E.), Mechanical Engineer (M.E.), and Doctor of Philosophy (Ph.D.).

ADMISSION.

Candidates for admission to courses for higher degrees must make application to the Dean of the School of Graduate Studies on application blanks, which may be obtained of him or of the Secretary of the University. Candidates must present the diplomas they hold, or certificates that they have received such diplomas, together with catalogues of the institutions from which they hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE.

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the course of study pursued must have been such as to qualify the candidates for pursuing the subjects chosen for the Master's or other higher degree sought. In seeking admission the applicant must state whether he desires to obtain the Specialist degree or the Liberal Culture degree.

The Specialist degree is designed for students who propose to proceed toward the Doctor of Philosophy degree. Such candidates are required to complete one major and two minor subjects selected from properly correlated University subjects approved by the Faculty upon recommendation of the professors in charge and to present a satisfactory dissertation. Only one of the minor topics may be selected from the University subject which includes his major topic. Work for which this degree has been awarded may be credited as one year of work toward the Doctor of Philosophy degree, provided that it be in the same field of work.

The Liberal Culture degree is designed for students who do not intend to specialize in their work. Such candidates are required to complete

three full courses of studies, of two or three hours each, distributed among three University subjects, not more than six hours of which shall be given to any one subject. These subjects must have the approval of the Faculty on the recommendation of the professors in charge. The candidate must also present a thesis in the field to which his major subject belongs.

A candidate for a Master's degree must pass at least one full year in residence and study at this University, and no work done by him for the Bachelor's degree shall be counted again for a higher degree.

HIGHER DEGREES IN ENGINEERING.

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree sought.

A candidate for a degree in Engineering shall pass at least one full year of residence and study at this University, sustain satisfactory examinations on the studies pursued, and present an acceptable thesis, together with a bibliography. Three full courses is the minimum required as constituting a full year's work. The courses chosen must be passed upon by the Faculty of Graduate Studies and have the approval of the professors under whom they are to be taken.

DEGREE OF DOCTOR OF PHILOSOPHY.

The degree of Doctor of Philosophy is conferred upon a student who has pursued specialized courses in University Subjects; engaged in original research in certain of the various departments of law, letters, or science under university auspices, for a period of not less than three years; has submitted an acceptable thesis and has met all the requirements prescribed. The degree is given for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for this degree he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good standing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for

graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. The applicant may be credited with graduate work done at other universities, provided such work is shown to be of grade similar to that required here, but one year, preferably the last, must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

The candidate for the Doctor's degree shall offer three topics from the University Subjects—one major and two collateral minor studies, one of which minors may be in the subject which includes the major topic,—the combination to be approved by the Faculty of Graduate Studies. These must be pursued under the guidance of a committee consisting of the professors in charge of the University Subjects in which the studies are pursued, with the professor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics, but in general the major topic should be pursued during the whole time devoted to graduate work, and each minor topic during at least one year. The candidate shall pass satisfactory examinations upon the three subjects selected. He must satisfy the Faculty that he can read understandingly in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major subject and he must present a thesis upon some topic approved by the professor in charge of his major subject, which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography.

EXAMINATIONS.

Candidates must pass written examinations upon all their topics. The examinations upon the minor topics may be taken at the close of the respective years in which these topics are completed, or later, at the discretion of the examiner. The final written examination on the major topic shall cover the candidate's entire university work, and shall be given when the professor of that subject is satisfied that the sudent has taken sufficient work to warrant such an examination being taken. If a candidate has satisfactiorily passed his final written examination, he may be permitted to complete his thesis away from the University.

DEFENSE OF THE THESIS.

Before a candidate can be recommended to the Board of Trustees for the Doctor of Philosophy degree, he must have successfully defended his thesis in public before a Board of Experts not officially connected with the University. Before the candidate can be permitted to undertake the defense of his thesis, the thesis must have been favorably reported on and recommended for defense by the professor

having supervision over the candidate's major topic, and by a co-referee appointed from the Faculty of Graduate Studies.

The subjects from which the candidate's selection may be made, as the Faculty may determine in each case, are as follows:

Agriculture, Applied Mathematics, Architecture, Astronomy, Astro-Physics, Bacteriology, Botany, Chemistry, Classical Archaeology, Economics, Education, Civil Engineering, Electrical Engineering, Hydraulic Engineering, Mechanical Engineering, English, Ethics, Geology and Mineralogy, Germanic Languages and Literature, Greek Language and Literature, Histology and Embryology, History, History of Art, International Law and Diplomacy, Latin Language and Literature, Law, Mathematics, Meteorology, Pathology, Philosophy, Physics, Physiology and Pharmacology, Political Sciences, Preventive Medicine, Psychology, Romance Language and Literature, Semitic Languages and Literature, Sociology, Zoology.

REGULATIONS REGARDING THESES.

Theses must be presented to the Dean not later than May 1 for graduation in June. They must be typewritten on official thesis paper. which may be obtained from the Treasurer of the University. The thesis will be presented by the Dean to the Faculty, and by it referred to the Chairman of the Committee on the candidate and the co-referee appointed from and by the Faculty for examination as to its merits when, on a favorable report by then, it may be defended in the Public Disputation. After their acceptance, theses, with their accompanying drawings, are the property of the University, and must be deposited in the University archives, but the authors of them are permitted to make copies. The candidate shall arrange, to the satisfaction of the Faculty, to print his thesis within one year after the degree is granted, under the supervision of the professor in charge of his major subject, and shall present one hundred copies to the University, to be distributed among institutions of learning.

DOCTORATE DISPUTATIONS.

The Twentieth Doctorate Disputation was held publicly in University Hall,, October 16, 1911. The thesis that was successfully defended, the candidate and the members of the board of experts were as follows:

Thesis: The Humanistic School of Deventer and Its Offshoots. By Rev. Francis Xavier Zerhusen, A.B., 1906, Notre Dame University. Before Rev. Frank Sewall, S.T.D.; William Macon Coleman, A.M., Ph.D.; Andrew Wilson, D.C.L., Ph.D. Professor Hermann Schoenfeld, Ph. D., LL.D., presiding.

The Twenty-first Doctorate Disputation was held publicly in the Medical Building, May 20, 1912. The theses successfully defended, the candidates and the members of the boards of experts were as follows:

Thesis: Mercury Fulminate. By ALTON LEWIN KIBLER, A.B., 1904, Randolph Macon College; M.S., 1909, The George Washington University. Before HARVEY W. WILEY, Ph.D., LL.D; EDWIN A. HILL, Ph.D.; HIRAM COLVER MCNEIL, Ph.D. Professor FRANK WIGGLESWORTH CLARKE, Sc.D., presiding.

Thesis: Mineralogical Methods in Soil Investigation. By WILLIAM JOHN MCCAUGHEY, B.S., 1906, University of Pennsylvania. Before FRANK K. CAMERON, Ph.D., FRED E. WRIGHT, Ph.D.; R. S. BASSLER, Ph.D.; THOMAS M. PRICE, Ph.D. Professor GEORGE P. MERRILL, Ph.D., presiding.

THE COLLEGES.

The College session of 1912-13 begins Wednesday, September 25, 1912.

The Colleges are open to men and women.

ADMISSION.

Every applicant for admission is required to present a testimonial of good character and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificates of the College Entrance Examination Board will be accepted.

The requirement for admission is a four-year high-school course, or its equivalent, amounting to fifteen "units." For prescribed studies see the specifications of each college.

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

ENTRANCE EXAMINATIONS.

The regular examinations for admission are held in May.

The following is the schedule for 1913:

Tuesday, May 20, 1913.

Elementary Latin	9.00-11.00
Plane Geometry	11.00- 1.00
Physics	2.00- 4.00
Greek	2.00- 5.00

Wednesday, May 21.

Elementary Algebra	9.00-11.00
Elementary French	11.00- 1.00
Elementary German	2.00- 4.00
Ancient History	4.00- 6.00

Thursday, May 22.

Plane Trigonometry	9.00-11.00
Advanced French, Advanced German	11.00- 1.00
English	2.00- 5.00

Friday, May 23.

Advanced Algebra	9.00-11.00
Solid Geometry	11.00- 1.00
Chemistry; Advanced Latin	2.00- 4.00

Subjects offered for admission, but not named in the schedule of examinations, will be arranged for as occasion arises.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

Candidates from the Washington high schools for the Kendall and the University Scholarships will be examined on only nine units. These nine units upon which the examination will be given are the following: the specified subjects—English (three units), Mathematics (two units), and one other language (two units); the remaining two units may be in language, history, mathematics, physics, chemistry, biology—as the candidate shall elect. The remainder of the fifteen units must be certified from the high schools.

DEFINITION OF REQUIREMENTS.

English.

(Three units.)

The requirements in English are those recommended by the Conference on Uniform Entrance Requirements in English. These recommendations are as follows:

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation.

English Grammar and Composition.

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school, and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The

principles of English composition governing punctuation, the use of words, paragraphs, and the different kinds of whole composition, including letter-writing, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise narration, description, and easy exposition and argument based upon simple outlines. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

Literature.

The second object is sought by means of two lists of books, headed respectively, *reading* and *study*, from which may be framed a progressive course in literature covering four years. In connection with both lists the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages, both in verse and in prose. As an aid to literary appreciation he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

1. *Reading.*—The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to large freedom of choice, the books provided for reading are arranged in the following groups, from which at least ten units* are to be selected, two from each group:

* Each unit is set off by semicolons.

(*a*) The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings; and Daniel; together with the books of Ruth and Esther; the Odyssey, with the omission, if desired, of Books I, II, III, IV; V; XV; XVI; XVII; the Iliad, with the omission, if desired, of Books XI, XIII, XIV; XV; XVII, XXI; Virgil's Æneid. The Odyssey, Iliad, and Æneid should be read in English translations of recognized literary excellence.

For any unit of this group a unit from any other group may be substituted.

(*b*) Shakespeare's Merchant of Venice; Midsummer Night's Dream; As You Like It; Twelfth Night; Henry the Fifth; Julius Caesar.

(*c*) Defoe's Robinson Crusoe, Part I; Goldsmith's Vicar of Wakefield; either Scott's Ivanhoe or Scott's Quentin Durward; Hawthorne's House of the Seven Gables; either Dickens's David Copperfield or Dicken's Tale of Two Cities; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; George Eliot's Silas Marner; Stevenson's Treasure Island.

(*d*) Bunyan's Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography (condensed); Irving's Sketch Book; Macaulay's Essays on Lord Clive and Warren Hastings; Thackeray's English Humourists; Selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate; Parkman's Oregon Trail; either Thoreau's Walden or Huxley's Autobiography and selections from Lay Sermons, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; Stevenson's Inland Voyage and Travels with a Donkey.

(*e*) Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns; Gray's Elegy in a Country Churchyard and Goldsmith's Deserted Village; Coleridge's Ancient Mariner and Lowell's Vision of Sir Launfal; Scott's Lady of the Lake; Byron's Childe Harold, Canto IV, and Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Poe's Raven, Longfellow's Courtship of Miles Standish, and Whittier's Snow Bound; Macaulay's Lays of Ancient Rome and Arnold's Sohrab and Rustum; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Herve, Riel, Pheidippides, My Last Duchess, Up at a Villa —Down in the City.

2. *Study.*—This part of the requirement is intended as a natural and logical continuation of the students' earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. For this close reading are provided a play, a group of poems, an oration, and an essay, as follows:

Shakespeare's Macbeth; Milton's L'Allegro, Il Penseroso, and Comus; either Burke's Speech on Conciliation with America or both Washington's Farewell Address and Webster's First Bunker Hill Oration; either Macaulay's Life of Johnson or Carlyle's Essay on Burns.

Examination.

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

The first part of the examination will be upon ten units chosen in accordance with the plan described earlier, from the lists headed *reading;* and it may include also questions upon grammar and the simpler principles of rhetoric, and a short composition upon some topic drawn from the student's general knowledge or experience. On the books prescribed for reading, the form of the examination will usually be the writing of short paragraphs on several topics which the candidate may choose out of a considerable number. These topics will involve such knowledge and appreciation of plot, character-development, and other qualities of style and treatment as may be fairly expected of boys and girls. In grammar and rhetoric, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors.

The second part of the examination will include composition and those books comprised in the list headed *study.* The test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books prescribed for *study,* from the candidate's other studies, and from his personal knowledge and experiences quite apart from reading. For this purpose the examiner will provide several subjects, perhaps five or six, from which the candidate may make his own selections. The test on the books prescribed for study will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

LATIN.

Elementary (Two units).

a. i. Latin Grammar: The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verb; structure of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive.

ii. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based on Caesar.

b. Caesar: Any four books of the Gallic War, preferably the first four.

Advanced (Two units).

a. Cicero: Any six orations from the following list, but preferably the first six mentioned:

The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

b. Virgil: The first six books of Æneid.

c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.

d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

Greek.

Elementary (Two units).

a. i. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.

ii. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions.

The examination in grammar and prose composition will be based on the first two books of Xenophon's Anabasis.

b. Xenophon: The first four books of the Anabasis.

Advanced (One unit).

a. Homer: The first three books of the Iliad (omitting II, 494, to end).

b. Sight Translation, based on prose of no greater difficulty than Xenophon's Anabasis.

French.

Elementary (Two units). Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history Candidates must have had a two-years' course of five periods per week.

Advanced (Two units). Candidates in Advanced French must have partly translated, partly read, in addition to the requirements for Elementary French, at least 1,000 pages of difficult French of several different authors, including history, fiction, drama, and poetry. Candidates must have had a four-years' course of five periods per week.

Fraser and Squair's French Grammar or Grandgent's Essentials of French Grammar is recommended.

Spanish.

(Two units.)

Candidates in Spanish must have a good knowledge of grammar, including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-years' course of five periods per week.

German.

Elementary (Two units). Candidates in Elementary German must have had a two-years' course of five periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of an elementary German grammar is requisite, to be tested by the translation into German of some fifteen sentences. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

Advanced (Two units). Candidates in Advanced German must have had a four-years' course of five periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Lessing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

History.

In this subject special importance is attached to preparation in geography.

Ancient (One unit).

a. Greek History, through the Roman Conquest; as much as is contained in Myer's, Bottsford's, or West's History of Greece.

b. Roman History; as much as is contained in Allen's, Bottsford's or West's History of the Roman People.

Mediaeval and Modern European History (One unit). As much as is contained in Myer's History of Mediaeval and Modern Europe.

English History (One unit). As much as is contained in Larned's or Cheyney's History of England.

American History with the Elements of Civil Government (One unit). As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

Mathematics.

Elementary Algebra (One unit).

i. Algebra to Quadratics:

The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

ii. Quadratics, etc:

Quadratic equations and equations containing one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binominal theorem for positive integral exponents.

Advanced Algebra (One-half unit).

i. Progressions, etc.:

The progressions, the elementary treatment of permutations and combinations, and the use of four and five place tables and logarithms.

ii. Series, etc.:

Undetermined coefficients, the elementary treatment of infinite series, the binominal theorem for fractional and negative exponents, and the theory of logarithms.

iii. Theory of equations:

Determinants coefficients, the elementary treatment of including Horner's method for solving numerical equations.

Plane Geometry (One unit).

General text propositions, including the solution of simple original exercises and numerical problems.

Solid Geometry (One-half unit).

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres; of spherical triangles and the measurement of surfaces and solids.

Plane Trigonometry (One-half unit).

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulas, theory of logarithms and use of tables, solution of right and oblique plane triangles.

Physics.

(One unit.)

It is recommended that the candidate's preparation should include:

a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.

b. Instruction by lecture-table demonstrations.

c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note-book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

Chemistry.

(One unit.)

The candidate's preparation in chemistry should include:

a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board. The laboratory note-book must be submitted for inspection.

b. Instruction by lecture-table demonstrations.

c. The study of at least one modern text-book.

Requirements.—The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur,* phosphorus, silicon, potassium, *sodium,* calcium, magnesium, *zinc,* copper, mercury, silver, aluminum, *lead,* tin, *iron,* manganese, chromium.

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, sym-

bols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements, solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

Additional Subjects.

Certificates will be accepted in botany, zoology, physiology, physiography, political economy, drawing, music, and other accredited subjects in secondary schools.

Manual-training High School Subjects.

Technical subjects in manual-training high schools, or schools of similar grade, when duly certified, may be credited as follows:

Shopwork (not exceeding two units), domestic science and domestic art (not exceeding two units).

Business High School Subjects.

Commercial subjects in business high schools or schools of similar grade, when duly certified, may be credited as follows:

Accounting and Finance. (One unit.)
Bookkeeping. (Two units.)
Business Organization. (One unit.)
Commercial law. (One unit.)
Government and Industrial Problems. (One-half unit.)
Commercial History. (One-half unit.)
Commercial and Physical Geography. (One-half unit.)

ADMISSION TO ADVANCED STANDING.

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

SPECIAL STUDENTS.

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue. Persons are allowed to register as auditors for the regular fees without being required to take active part in the exercises or to pass examinations, but no credit will be allowed for such attendance.

SCHOLARSHIPS AND PRIZES.

Applications for scholarships should be filed with the Dean of the College in which the student is registered not later than September fifteenth. All scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term, or whose deportment is unsatisfactory, will be reported to the President's Council, and in the absence of extenuating circumstances the scholarship will be revoked. All designations to scholarships are awarded by the President's Council on the recommendation of a Dean.

Scholarships for Competition.

The University offers the following scholarships to be awarded on competitive examination given at the time of the May entrance examinations. Holders of these scholarships are expected to pursue a regular course in one of the colleges of the Department of Arts and Sciences. No scholarship is awarded to a candidate whose examination average is below 80 per cent.

KENDALL SCHOLARSHIP.—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that member of the graduating class of any of the Washington High Schools who attains the highest average in the entrance examinations. This scholarship continues throughout the undergraduate course, and the student holding it pays only the matriculation, library, laboratory, and graduation fees.

UNIVERSITY SCHOLARSHIPS.—The University offers also six scholarships, to be awarded annually to members of the graduating classes of any of the Washington High Schools. These scholarships continue throughout the undergraduate course, and students holding them pay only the matriculation, library, laboratory, and graduation fees.

Scholarships for Assignment.

DAVIS SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

MARY LOWELL STONE SCHOLARSHIP.—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University.

MARIA M. CARTER SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

FARNHAM SCHOLARSHIP.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

WITHINGTON SCHOLARSHIP.—This scholarship was founded in 1830, by the New York Baptist Theological Seminary, to be known as the Withington scholarship. It has an annual stipend in tuition fees of sixty dollars.

WALKER SCHOLARSHIP.—This scholarship was founded in 1824 by William Walker, Esq., of Putnam County, Georgia. It carries an annual stipend of one hundred dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

MOREHOUSE SCHOLARSHIP.—This scholarship was founded by Mr. A. Morehouse, of Washington, D. C., in 1861. It carries an annual stipend of sixty dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

HENRY HARDING CARTER SCHOLARSHIPS.—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consist of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

ADMIRAL POWELL SCHOLARSHIPS.—The Admiral Powell Scholarships were founded by the late Admiral Powell, U. S. Navy. The income from this endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland, or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices

as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to come up for examination as warrant officers in the Engineer Department of the Navy, or to those who desire to fit themselves for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics:

	Hours.
Navigation and Nautical Astronomy	6
Algebra and Geometry	3
Trigonometry	1½
Mechanical and Machine Drawing	4
English	3
French	3
German	3
Spanish	3
International Law	1
Commercial Geography	1
Admiralty Law	½
Boilers and Power Plants	3
Measurement of Power	2
Electricity	3
Electrical Engineering	6

MINISTERIAL AID.—The University authorizes the remission of a stated amount in tuition fees, to be called Ministerial Aid, which may be given to students, resident in the District of Columbia or its immediate vicinity, in the regular courses of Columbian College, preparing for the ministry and not yet ordained. Any student receiving Ministerial Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every ten dollars of tuition remitted, and of not more than four hours in any one week.

UNIVERSITY AID.—The University authorizes the remission of a stated amount in tuition fees, to be called University Aid, which may be given to undergraduate students in regular courses in the Department of Arts

and Sciences, financially dependent on parents, who are residents of the District of Columbia or its immediate vicinity and whose circumstances warrant pecuniary assistance. Any student receiving University Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every ten dollars of tuition remitted, and for not more than four hours in any one week.

COLUMBIAN WOMEN LOAN FUND.

The Columbian Women have established a fund from which money is loaned to women students, preference being given to women who have already begun work in the University and who need assistance in continuing it. The administration of the fund remains with the Columbian Women.

PRIZES.

Only candidates for degrees may compete for these prizes.

STAUGHTON AND ELTON PRIZES.—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

RUGGLES PRIZES.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor Willian Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

DAVIS PRIZES.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

DAUGHTERS OF THE AMERICAN REVOLUTION PRIZES.—These prizes founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediaeval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

THE THOMAS F. WALSH PRIZE.—This prize, established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, consists of a gold medal awarded annually to that student of the graduating class who, having maintained a high standard in the

regular classes of Mediaeval, Modern European, English, and American History, shall produce the best essay upon a designated period of the History of Ireland.

E. K. Cutter Prize.—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

Willie E. Fitch Prize.—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq., in memory of his son, consists of fifty dollars, which is awarded annually for the best examination in Chemistry.

The Gardiner G. Hubbard Memorial Prize.—This is a prize in American History established by Mrs. Gertrude M. Hubbard in memory of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that member of the graduating class who has during four years maintained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

Muth Prize.—Geo. F. Muth & Co. offer a set of drawing instruments to the student taking Advanced Mechanical Drawing who makes the highest average record in that subject and in the previous year's Mechanical Drawing.

Colonial History Prize.—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the Professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

James Macbride Sterrett, Jr., Prize, founded by Professor James Macbride Sterrett in memory of his son, consists of a gold medal, annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

The Chi Omega Prize in Philosophy.—An annual prize of fifteen dollars is offered by the Phi Alpha Chapter of the Chi Omega Fraternity for the best essay on a philosophical subject to be announced at the close of the preceding academic year by the Committee in charge. Essays must meet the requirements defined by the Committee,

and be submitted on or before April 1st. Only women students who are members of a senior class in the Department of Arts and Sciences, and who have previously completed the courses in General Psychology, Logic, and the History of Philosophy, are eligible to compete.

DAVIS PRIZE SPEAKING.

The Davis Prize Speaking is held on the Tuesday after the Easter holidays. The Davis Prizes were founded by Hon. Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in cash or gold medals, of the value of $5. of $10, and of $15 annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College."

The award of these three prizes is determined by a public speaking contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of Columbian College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the Faculty of the Columbian College.

PRIZES AWARDED.

1911-12.

Staughton Prize.....Katharine Mitchell Newbold.
Elton Prize Katharine Mitchell Newbold.
Davis Prizes:
First Prize.....Harold Keats.
Second Prize Anna Lorette Rose.
Third Prize Herman Blaney Chubb.
Daughters of the American Revolution Prizes.....Harold Keats.
Katharine Strong Summy.
Thomas F. Walsh Prize Edith Katherine Cash.
E K. Cutter Prize Enid Marian Hobbs.
Funk and Wagnalls Prize Fredericka Neumann.
Gardiner G. Hubbard Memorial Prize Harold Keats.
Colonial History Prize of the Society of the
Colonial Dames of America.....Kate Carroll Moore.
Fitch Prize in Chemistry.....George Pelham Walton.
Muth Prize in Drawing.....Francis Edwin Marvin

ENOSINIAN SOCIETY.

The Enosinian Society, a literary association, to which any University student is eligible, meets regularly for the purpose of improvement in debate and composition.

This society had its beginning March 6, 1822, during the first session of Columbian College, when a number of students held a meeting "for the purpose of establishing a debating society."

RELIGIOUS WORK.

The student movement in Association work is represented by the Young Men's Christian Association of the University, which was organized in the fall of 1905. The Association plans and conducts religious work among the men of the University. The Association calendar includes Bible study clubs, a weekly chapel service, and occasional men's meetings.

Similar lines of religious work are conducted among the women students by the Young Women's Christian Association.

COLLEGE CHAPEL.

Chapel Services are held at 12:15 p. m., every week day, except Saturday, throughout the academic year.

The Deans of the Colleges will confer with students as they may desire on questions concerning their welfare and will co-operate with them in all ways to make the college life one of personal helpfulness.

FEES.

1. Matriculation fee (payable once) $5
2. Annual library fee 2
3. *Tuition fee per annum for each hour per week* of undergraduate courses leading to the degrees of A.B. and B.S., and for graduate courses leading to the degree of M.Dip 10

 The maximum fee charged in any one year is $150.
4. Tuition fee per annum for graduate courses leading to the degrees of A.M., M.S., C.E., E.E., M.E., Jur.D., and Ph.D... 150

 Where candidates for higher degrees exceed the minimum time limit they may be liable for an additional charge of $50 per annum for each topic pursued by them.
5. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, except for courses which do not begin with the terms 2

6. Laboratory courses:
 Material fees:
 - Experimental Psychology 2
 - Geology 1, Zoology, Botany, Chemistry 28, each..... 5
 - Chemistry 4 (Assaying).
 - Chemistry 2, 3, and 7; Electrical Engineering; Physics, each 10
 - Chemistry 4 (Assaying)..... 20
 - Chemistry, except 2, 3, 4, 7, and 28, each..... 25

 Deposits to cover breakage of apparatus issued, the amounts paid in excess of breakage to be returned:
 - Chemistry, 2, 3, 7, and 28, each..... 10
 - Chemistry, except 2, 3, 4, and 7, each..... 25

7. Fee for graduation..... 10
8. Tutition fee for the following special course, not taken by candidates for a degree..... 40
 Chemistry 4 (Assaying.)
9. In determining tutition fees, three hours of laboratory work in Chemistry, and two hours of laboratory work in other subjects count as one hour.
10. Fee for certificates under the seal of the University..... 2

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

PAYMENT OF FEES.

Matriculation, library, and other special fees, and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in monthly installments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. All fees are payable at the office of the Treasurer of the University, *2024 G Street.*

BOARD AND ROOMS.

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY,
The George Washington University,
2023 G Street, Washington, D. C.

COLUMBIAN COLLEGE.

ADMISSION.

Candidates for admission to the Freshman Class in Columbian College must meet the general admission requirements (p. 51) of fifteen units. *These fifteen units must include English, 3 units; Mathematics, 2 units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units.* The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

For admission to advanced standing or as special students, see pp. 60-61.

REQUIREMENTS FOR DEGREES.

The undergraduate degrees offered by Columbian College are Bachelor of Arts and Bachelor of Science in Chemistry. To be recommended for either of these degrees, the student must be registered for at least one academic year, must satisfy the admission requirements, and must complete at least sixty "hours" of undergraduate courses. An "hour" of credit is one of recitation or lecture work a week or on laboratory period a week for one academic year. No time limit for the course is prescribed and the degree is given when the total of prescribed and elective studies is completed.

One grade of special distinction is recognized in awarding the bachelor's degree. It is shown by inserting the words "With Distinction" on the diploma after the name of the degree. It is awarded under the following conditions:

"That the names of all students who have received a mark of at least B (90 per cent) on courses representing at least sixty (60) per cent of all hours taken by them be submitted by the Dean to the Faculty of the Department in which the student shall be studying for a degree, after the completion of all final examinations in such students' final year of study for their degree;

"That the Faculty, after separate consideration of each individual case, shall, if it see fit, recommend the awarding of the degree 'With Distinction' to students who shall have fulfilled the conditions above specified."

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study including a group of prescribed subjects, and aggregating at least sixty "hours."

There are five groups of prescribed subjects for the first two years of the college course. Every candidate for the degree of Bachelor of Arts selects one of these groups of prescribed subjects, and thereafter he is

not permitted to change to another group except on condition that he fulfill the requirements of the group to which he changes.

The studies of the last two years of the course in the College of Arts and Sciences are elective, subject only to such administrative supervision as will insure the general consistency and the liberal character of the courses selected.

The scope of the five groups of prescribed subjects is a provision alike for the diversity in the subjects of the secondary school curriculum leading to a college course, and the needs of the various graduate and professional courses of study in the University for which the college course is a preparation.

Group I emphasizes Latin and Greek studies, and it would naturally be taken by students whose preparatory work has included four years of Latin. Group II emphasizes the Modern Languages, affording to students whose preparation has not included Latin the humanistic influences of the literatures of the Modern Languages. Group III emphasizes Mathematics and the Natural Sciences, and would naturally be selected by the student whose college preparation has been scientific rather than literary. Group IV consists of such studies as would constitute needed preparation for the Department of Law. Group V consists of the subjects that should be taken by those intending to enter the Department of Medicine. The five groups are as follows:

(NOTE.—Whenever in the following groups French or German is taken, if it is elementary, the same language shall be continued the succeeding year.)

GROUP I.

	Hours.
English	6
History	3
Languages*	9
Latin	6
Mathematics	3
Psychology and Logic	3

GROUP II.

	Hours.
English	6
French	3
German	6
History	6
Mathematics or Science	3
Psychology and Logic	3
Romance Language	3

* To be elected from Greek, French, German.

GROUP III.

	Hours.
English	3
History	3
Mathematics	6
Modern Languages	6
Psychology and Logic	3
Science	9

GROUP IV.

	Hours.
Economics	3
English	6
History	6
Mathematics	3
Modern Languages or Latin	6
Psychology and Logic	3
Science	3

GROUP V.

	Hours.
English	3
German	3
History	3
Mathematics	3
Psychology and Logic	3
Sciences:	
Chemistry, 1, 3, 23	7
Physics, 1, 2, or 2, 3	5
Biology	3

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN CHEMISTRY.

Freshman Year.

	Hours.		Hours.
Chemistry, 1, 2	5	French or German	3
English, 1 or 2	3	Geology, 1	2
Mathematics, 3 or 6	3		

Sophomore Year.

	Hours.		Hours.
Chemistry, 3, 20	5	Mathematics, 9 or 12	3
French or German	3	Physics, 1, 2	5

Junior Year.

Chemistry, 21, (4), 23..... 6 Mathematics, 20 or 21..... 3
French or German..... 3 Electrical Engineering, 7..... 3

Senior Year.

Chemistry, 6, 24, 25, 27..... 9 Geology, 2..... 2
Economics or History..... 3

COMBINED COURSES.

The regular courses in Columbian College are so correlated with courses in the professional departments that the degree of Bachelor of Arts and the professional degree in Law may be obtained in six years, and in Medicine in seven years.

SCHEDULE OF COURSES IN THE REQUIRED SUBJECTS FOR THE FIRST TWO YEARS.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
9.15	Math. 3	English 3	Math. 3	English 3	Math. 3	English 3
10.15	Math. 9 Phil. 1a, 2a Spanish 2	English 1 Physics 2	Math. 9 Phil. 1a, 2a Spanish 2	English 1 Physics 2	Math. 9 Phil. 1a, 2a Spanish 2	English 1
11.15	Econ. 20 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 20 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 20 French 1 German 3 Greek 2	German 1
1.45	Graphics 1 Latin 2 Physics 3	Chem. 2	Graphics 1 Latin 2 Physics 3	Chem. 2	Latin 2 Physics 3	
2.45	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 Hist. 26	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 Hist. 26	Greek 1 Hist. 1, 2	
3.45	Graphics 1 Hist. 3, 4 Latin 1	Chem. 2	Graphics 1 Hist. 3,4 Latin 1	Chem. 2	Hist. 3, 4 Latin 1	
5.00	English 2 Physics 1 Math. 4	Chem. 1 French 4 German 2 Hist. 32 Geology 3	English 2 Physics 1 Math 4	Chem 1 French 4 German 2 Hist. 32	English 2 Physics 1 Math. 4	Chem. 1 French 4 German 2
5.50	Econ. 20 English 4 Geology 2 Math. 12 Math. 6 Spanish 1	French 2 Geology 1 German 4	Econ. 20 English 4 Math. 12 Math. 6 Spanish 1	French 2 Geology 1 German 4	Econ. 20 English 4 Geology 2 Math. 12 Math. 6 Spanish 1	French 2 German 4

COLLEGE OF ENGINEERING AND MECHANIC ARTS.

ADMISSION.

Candidates for admission to the Freshman Class in the College of Engineering are required to present fifteen units for admission, (p. 51) distributed as follows:

	Units.
English	3
French or German	4
Plane and Solid Geometry	1½
Elementary and Advanced Algebra	1½
Plane Trigonometry	½
Chemistry	1
Physics	1
Electives	2½
	15

For admission to advanced standing or as a special student see pages 60-61.

NOTE.—The modern language requirement may be satisfied by presenting four units in one language, or two units in French and two units in German. Students who present four units in one language will study the other language two years in College. Students who present two units in French and two units in German will study each language one year in College.

COURSES FOR A DEGREE.

Three courses of study are offered:

I. CIVIL ENGINEERING.
II. ELECTRICAL ENGINEERING.
III. MECHANICAL ENGINEERING.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, and in Mechanical Engineering, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington University are open to those who receive the above degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

REQUIREMENTS FOR A DEGREE.

The arrangement of the topics in each of the regular courses for a degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of Department Subjects on pages 84-118, to which reference should be made for more complete description.

COMMON TO ALL COURSES.

Freshman Year.

Chemistry, 1, 7.
General Chemistry and Qualitative Analysis.
English, 1 or 2.
Rhetoric.
French or German.
Graphics,, 1.
Mechanical and Freehand Drawing.
Mathematics, 9 or 12.
Trigonometry; Analytic Geometry.

CIVIL ENGINEERING COURSE.

Sophomore Year.

Civil Engineering, 1, 3, 4.
Surveying; Highway Engineering; Materials of Construction.
French or German.
Graphics, 8.
Descriptive Geometry.
Mathematics, 20 or 21.
Calculus.
Physics, 1, 2.
General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 22.
Mechanics; Mechanics of Materials.
Chemistry, 6.
Metallurgy.
Civil Engineering, 2, 8, 9, 22.
Railroad Engineering; Practical Astronomy; Testing Laboratory; Theory of Structures.
Electrical Engineering, 6.
Industrial Engineering.
Geology, 2.

Senior Year.

Applied Mathematics, 21.
Hydraulics.
Civil Engineering, 20, 21, 23, 24.
Masonry; Hydraulic Engineering; Theory of Structures; Sanitary Engineering.
Contracts and Business Law.

ELECTRICAL ENGINEERING COURSE.

Sophomore Year.

French or German.
Graphics, 2, 8.
Advanced Mechanical Drawing; Descriptive Geometry.
Mathematics, 20 or 21.
Calculus.
Mechanical Engineering, 1.
Mechanism.
Physics, 1, 2.
General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 22.
Mechanics; Mechanics of Materials.
Chemistry, 6.
Metallurgy.
Electrical Engineering, 1, 4, 5.
Elementary Electricity and Electrical Engineering; Electrical Measurements; Electrical Engineering Laboratory.
Mechanical Engineering, 20, 21.
Steam Engineering; Boilers.

Senior Year.

Applied Mathematics, 21.
Hydraulics.
Civil Engineering, 5, 6.
Surveying Instruments; Foundations.
Contracts and Business Law.
Electrical Engineering, 8, 21, 22, 23, 24, 26, 27.
Electrical Designs; Alternating Currents; Electrical Distribution; Electrical Applications; Electrical Engineering Laboratory; Electric Lighting; Electric Railways.
Mechanical Engineering, 10, 23.
Engineering Laboratory; Hydraulic Machinery.

MECHANICAL ENGINEERING COURSE.

Sophomore Year.

French or German.
Graphics, 2, 8.
 Advanced Mechanical Drawing; Descriptive Geometry.
Mathematics, 20 or 21.
 Calculus.
Mechanical Engineering, 1.
 Mechanism.
Physics, 1, 2.
 General Physics; Laboratory Physics.

Junior Year.

Applied Mathematics, 20, 22.
 Mechanics; Mechanics of Materials.
Civil Engineering, 22.
 Theory of Structures.
Mechanical Engineering, 6, 9, 20, 21, 24, 28.
 Engineering Drawing; Engineering Laboratory; Steam Engineering; Boilers; Cotton Machinery and Machine Tools; Industrial Management.

Senior Year.

Applied Mathematics, 21.
 Hydraulics.
Chemistry, 6.
 Metallurgy.
Civil Engineering, 5, 6.
 Surveying Instruments; Foundations.
Contracts and Business Laws.
Electrical Engineering, 7.
 Dynamos and Motors.
Mechanical Engineering, 7, 10, 22, 23, 26, 27.
 Machine Design; Engineering Laboratory; Gas Engines; Hydraulic Machinery; Dynamics of Machinery; Power Plant Design.

COLLEGE OF THE POLITICAL SCIENCES.

The College of the Political Sciences offers systematic instruction in the various branches of the political sciences. This education is intended to give a training that will fit for consular and diplomatic positions and for the public service of the United States, while imparting that general culture and equipment necessary for efficient citizenship and the intelligent grasp of public questions. It is further intended as a suitable training for those who expect to enter commercial life, or to engage subsequently in the study of law.

In Washington are collected the official records of the country. As the capital of the nation, Washington furnishes the best, and in many instances the only, opportunity for studying the government in actual operation. Congress, the Supreme Court, the Executive Departments, and the government of the District of Columbia afford object lessons for the study of political science. Such an atmosphere for the student of the political sciences can be found nowhere else.

ADMISSION.

Candidates for admission to the freshman class in the College of the Political Sciences must meet the general admission requirements (p. 51) of fifteen units. These 15 units must include English, 3 units; mathematics, 2 units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units. The remainder of the requirement is elective.

For admission to advanced standing or as special student see pages 60-61.

THE DEGREE OF BACHELOR OF ARTS.

The only undergraduate degree conferred by the University for work completed in the College of Political Sciences is the degree of Bachelor of Arts (A.B.). To be recommended for this degree, the student (1) must have satisfied the entrance requirements, (2) must have been registered for at least one academic year, and (3) must have completed a total of sixty hours of class-room work (fifteen hours per week for fours years), of which at least 30 must be taken in the field of the Political Sciences, or must be credited with subjects parallel to those taught in the College and obtained through transfer from another institution of similar grade.

Students who are registered in the College of the Political Sciences are required to pursue courses aggregating 6 hours per week in history, economics, or political science, through their first and second years. Other courses sufficient to aggregate 9 hours in each of the first two

years may be chosen from any one of the five groups described in Columbian College. In other words, students may select studies conforming to the arrangement in any one of these five groups, substituting an aggregate of not less than 6 hours in history, economics, and political science for such other courses therein mentioned as they may desire to omit. During the third and fourth years of the student's course, subjects aggregating 9 hours per week must be pursued in the special field of the Political Sciences. An aggregate of 30 hours per week in that field is thus required for graduation from the College of the Political Sciences. Students may, however, elect the whole of their work during the third and fourth years in the College of the Political Sciences, thus securing a total credit of 42 hours. This credit, together with 18 hours chosen in some one of the groups of studies indicated in Columbian College, will entitle the student to the degree of Bachelor of Arts. Before graduation, students will be expected to pursue as part of their regular courses English and two other modern languages, electing at least 3 hours per week for one year in each language chosen.

A representative course of study covering the first two years of a student's course may be suggested as follows:

	Hours.
Economics	6
Political Science and History	9
English	3
Modern Languages	6
Mathematics or Natural Science	3
Psychology	3

Variations of this elective grouping and selection of studies to fulfill the general requirements of the grouping may be worked out in consulation with the Dean.

In the senior year students may elect 15 hours from courses in the Law School if they desire.

The Bachelor of Arts degree is granted by the University upon the recommendation of the Faculty. No student may receive the degree who has not been in residence at this University at least one academic year.

HIGHER DEGREES.

The higher degrees conferred by the University for work completed in the College of the Political Sciences are Master of Arts (A.M.), Master of Diplomacy (M.Dip.), and Doctor of Philosophy (Ph.D.). Candidates for any one of these degrees must possess a Bachelor of Arts degree, or its equivalent, granted by a college or university of acceptable rank.

Candidates for the degree of Master of Diplomacy (1) must possess a knowledge of two modern languages other than English, (2) must complete twenty-four hours (twelve hours per week for two years) of class-room work, and (3) must prepare a satisfactory dissertation showing original research and investigation. But applicants for this degree who, in the attainment of their Bachelor of Arts degree, have completed the equivalent of twelve acceptable units in economics, political science, and public law may be credited with not more than twelve units toward the degree of Master of Diplomacy. Candidates for the Master of Diplomacy degree pursue their work under the general direction of the Dean of the College of Political Sciences. This degree is awarded by the University upon the recommendation of the Faculty of the College of Political Sciences.

Candidates for the Master of Arts or the Doctor of Philosophy degree pursue their work as students registered in the School Graduate Studies (See p. 46).

LIBRARY.

The library of the College of the Political Sciences contains several thousand volumes carefully selected with special reference to library work in connection with the courses of instruction offered. It affords a practical work-room for the use and convenience of students and is open during the day and evening.

COURSES OF STUDY.

The coures offered in this College are grouped in four sections: (1) Political Science, (2) International Law and Diplomacy, (3) Economics, and Sociology, (4) History. (See pp. 84-118).

Courses of the College are open to students in the other departments of the University with the consent of their respective Deans. Students in the College of the Political Sciences may, likewise, with the consent of the Dean of the College, elect courses in the other departments of the University.

TEACHERS COLLEGE.

The purpose of the Teachers College is to provide (*a*) collegiate training for teachers, (*b*) instruction in education as a department of science.

The aims of the Teachers College may be summarized as follows:

(*a*) To promote the knowledge of educational science.

(*b*) To fit students for the higher positions in the public school service.

(*c*) To secure to teaching the rights and prerogatives of a profession.

(*d*) To aid in raising the standards of educational practice, and so to increase the efficiency of public education.

ORGANIZATION.

In order to combine to the best advantage a general college education with adequate professional training for teaching, the Teachers College provides a four year's college course, the first two years of which are devoted to a foundation of general culture courses, and the last two to the professional courses and to specialization in the subjects which the student expects to teach.

Inasmuch as a large number of teachers in service are without college degrees, and a still larger number desire to supplement their professional training by taking special courses, the courses of instruction have been arranged to meet the needs of teachers in service, as well as of undergraduate students. The required courses constituting the prescribed work in education are given both in the morning and in the late afternoons hours, and are, therefore, easily accessible both to students and to teachers from the schools.

Opportunity is also offered to graduate students to pursue a major or minor in Education, leading to the granting of a Teacher's Diploma in conjunction with a Master's or a Doctor's degree.

ADMISSION.

Candidates for admission to the Freshman Class in the Teachers College must meet the general admission requirements (p. 51) of fifteen units. *Three of these must be in English, two in Mathematics, and two in one of the following languages: Latin, Greek, French, German, or Spanish.* The remainder of the required fifteen units may be satisfied by any accredited secondary subjects.

Persons desirious of taking one or more of the professional courses, without becoming candidates for a degree, may be admitted as special students on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage.

Graduates of approved Normal Schools, Training Colleges, or Tech-

nical Schools, and teachers of experience who have studied privately, will be admitted to such advanced standing as the courses they have pursued warrant.

For further information concerning admission as special student or to advanced standing, see pp. 60-61.

THE TEACHERS COURSE.

The full college course for the training of teachers comprises the following educational divisions, the first two of which are made up of prescribed studies, the third of electives:

(*a*) A foundation of 25 hours of general culture studies, prescribed in accordance with the view that a teacher's preparatory training should omit no one of the principal elements of culture.

(*b*) A minimum of ten hours of professional training courses.

(*c*) Twenty-five elective hours of special information courses and further training courses.

In recognition of the professional training and the high number of prescribed hours of study, graduates of the Teachers College will receive, in addition to the Bachelor of Arts degree, a Teacher's Diploma. Both are conferred by the University.

An "hour" of study represents one hour of recitation or lecture work per week for one academic year, or its equivalent.

GRADUATION.

To be recommended for a Bachelor of Arts degree and a Teacher's Diploma, the student must complete courses of study aggregating at least sixty hours. Thirty-five of these hours are in prescribed studies, and the remainder in electives. The prescribed studies are the following:

(*a*) In general culture subjects:

	Hours.
English	3
Mathematics or Science	3
French, German, Latin or Greek	3
History	3
Psychology and Logic	3
Philosophy	5
Languages or Sciences	5

(*b*) In professional subjects:

	Hours.
History of Education	2
Principles of Education / Educational Psychology	3
Child Study and School Hygiene, or / Principles of Secondary Education	2
Class-room Management and Supervision, or / School Administration	1
Observation and Practice Teaching	2

(For further definition of these requirements, see the introductory paragraph under "Education," page 111).

The electives should be chosen with direct reference to the subjects which the student wishes to teach. They are accordingly subject to the following restrictions:

All regular students must complete before graduation at least 9 hours in a Major, and at least 5 hours in a Minor subject, in addition to the first required course, if any, in the same subject.

As a Major, any one of the following subjects, or group of subjects, may be chosen: English, Latin, Greek, French, German, Mathematics, Physical Science, Biological Science, History, Economics and Political Science, Philosophy and Psychology.

As a Minor, choice may be made of any of the other subjects in the same list, or of Education.

THE TEACHERS DIPLOMA.

The Teacher's Diploma is granted in connection with the Bachelor of Arts degree upon the fulfillment of the following conditions: *a*. The student must have satisfactorily completed the courses of study defined in the preceding paragraph. *b*. He must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

The Diploma is also given in connection with higher degrees, provided a graduate student has taken a major or minor in Education, and has also satisfied the requirements *a* and *b* above, or in lieu of *a* has completed an equivalent amount of pedagogical and other work in another institution.

PRACTICE TEACHING.

Ample opportunity will be afforded for practice in teaching by (a) attendance upon observation classes conducted by experienced teachers, and (*b*) actual practice in teaching under the supervision and subject to the criticism of teacher critics.

EXPERIMENTAL WORK.

Teachers College maintains a psychological laboratory for introductory experimental work. The equipment is specially adapted to the investigation of problems of interest to students of education.

The school system of a large city, moreover, offers abundant opportunity for observation, and for the statistical study of methods and other practical educational problems.

TEACHERS COLLEGE LIBRARY.

The department library of Teachers College is supplied with the most important reference books and periodicals in Education, Psychology, and Philosophy, together with the principal Reports, etc. The reading room is open from 9.15 a. m. to 10 p. m., each day of the University calendar year. In addition, books may be withdrawn over night and from Saturday to Monday. For a statement of other library facilities see "University Library," page 38.

TEACHERS APPOINTMENT BUREAU.

The Teachers College maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in the Teachers College, or in Columbian College, to secure positions as Teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers. Communications should be addressed to the "Teachers Appointment Bureau," Teachers College, The George Washington University.

DEPARTMENT OF ARTS AND SCIENCES

COURSES OF INSTRUCTION.

Provided by the Department of Arts and Sciences.

Courses of instruction are divided into three sections.

First-section courses may be taken by third or fourth year students only by permission of the Dean and the professor in charge of the subject. They may sometimes be recommended to graduate students, but are not counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the bachelor's degree; they serve, however, with additional work, as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses from 20 to 49, inclusive; third-section courses are numbered on from 50. The number of hours, unless otherwise specified, indicate hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one academic year; laboratory hours in Chemistry count one-third unit each, in other subjects one-half unit each. Laboratories and drawing-rooms will be open from 9.15 a. m. till 10 p. m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all the preliminary requirements for the course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

ARCHAEOLOGY AND HISTORY OF ART.

MITCHELL CARROLL, Ph.D.....Professor

Second Section. For Undergraduates and Graduates.

20. HISTORY OF ART. An introductory course treating important periods in Greek, Roman and Renaissance Architecture, Sculpture and Painting. Illustrated lectures and conferences. *Wed., Fri.,* at 5.00. Professor CARROLL.

Third Section. Primarily for Graduates,

50. Classical Archaeology. Topography and Monuments of Athens and Rome. Two hours. Professor Carroll.

51. Ancient Art. A course in the history of Egyptian, Assyrian, Persian, Greek, and Roman Architecture. Professor Carroll.

52. Life, Literature, and Art of the Homeric Age. Professor Carroll.

Use is made of the illustrative material in the Library of Congress, the National Museum and the Corcoran Gallery of Art. Students are invited to the open meetings of the Washington Classical Club and the Washington Society of the Archaeological Institute of America.

ASTRO-PHYSICS.

Frederick Eugene Fowle, Jr.....Lecturer

Third Section. Primarily for Graduates.

54. A lecture course on the astro-physical instruments employed in modern research. Mr. Fowle.

BIOLOGICAL SCIENCE.

Paul Bartsch, M.S., Ph.D.....Professor
Albert Mann, A.M., Ph.D.....Professor
Julia Theckla Macmillan, A.M.....Assistant
George Traver Harrington, B.S. in Agri., B.S. in Chem.....Assistant

Zoology.

First Section. Primarily for Undergraduates.

1. Systematic Zoology. I. Invertebrates. This includes lectures and laboratory work. The lectures in the scope cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters, classificatory laws, and the general principles of evolution. Lecture Mon., at 5.00; Laboratory, Wed., Fri., 5.00-6.40. Professor Bartsch.

2. Systematic Zoology. II. Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrata, and correlated with these is the study and dissection of typical specimens of each group. Open only to students having completed Course 1. Lecture, Mon., at 5.50; laboratory Wed., Fri., 5.00-6.40. Professor Bartsch.

Second Section. For Undergraduates and Graduates.

20. Practical Zoology. A lecture course illustrated with lantern slides and demonstrators. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to expound the economic side of zoology. Open to all students. One hour. Professor Bartsch.

23. Ornithology. A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University posesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. Professor Bartsch.

Laboratory courses in histology and physiology will be arranged for competent students.

Botany.

First Section. Primarily for Undergraduates.

1. General Botany. An introductory course. Lecture, *Fri.*, at 5. Laboratory periods, *Tu., Th.*, 5 to 6.40. Mr. Harrington.

Third Section. Primarily for Graduates.

50. Original investigation in (*a*) Economic Botany, Materia Medica, etc.; (*b*) Parasitism and Monstrosities; (*c*) Researches in Physiology of single groups; (*d*) Comparative Organography. Professor Mann.

CHEMISTRY.

Charles Edward Munroe, Ph.D., LL.D.....Professor
Frank Wigglesworth Clarke, Sc.D.....Professor
Harvey Washington Wiley, Ph.D., M.D.....Professor
Frank Adelbert Hornaday, S.B., M.D.....Associate Professor
Edward Grant Seibert, M.D.....Assistant Professor
N. Monroe Hopkins, Ph.D.....Assistant Professor
Edwin Allston Hill, Ph.D.....Assistant Professor
Thomas Malcolm Price, Ph.D.....Assistant Professor
Otis Dow Swett, M. S.....Assistant Professor
Hiram Colver McNeil, Ph.D.....Assistant Professor

First Section. Primarily for Undergraduates.

1. General Chemistry. A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, ignorganic, organic, and technical chemistry. *Tu., Th., Sat.*, at 4.50. Professor Munroe, Assistant Professor Swett.

2. Laboratory Practice. A laboratory course for the study of the principles of chemistry and the method of conducting chemical experiment. Two three-hour periods. *Tu., Th.,* at 1.30 or at 7. Professor Munroe, Assistant Professor Swett.

3. Preparation and Study of the Properties of Chemical Substances. A laboratory course. Two three-hour periods. *Tu., Th.,* at 1.30 or at 7. Professor Munroe. Assistant Professor Swett.

4. Assaying and Metallurgy of the Precious Metals. Carried on by the method used by the Government Assayers, the Laboratory being fitted up on the plan of that of the United States Mint. Twelve hours for three months. Professor Munroe, Assistant Professor Swett.

5. Principles of Analysis. Lecture. One hour. Professor Munroe.

6. Metallurgy of Iron and Steel. A course of lectures and readings. *Tu.,* at 6.00. Professor Munroe.

7. Qualitative Analysis. A brief course intended primarily for students in engineering. Two three-hour periods. *Tu., Th., at* 1.30 or at 7. Professor Munroe. Assistant Professor Swett.

Second Section. For the Undergraduates and Graduates

20. Qualitative Analysis. A laboratory course in the study of the properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Professor Munroe, Assistant Professor Price, Assistant Professor Swett.

21. Quantitative Analysis. A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Professor Munroe, Assistant Professor Price, Assistant Professor Swett.

23. Organic Chemistry. Advanced course. *Wed., Fri.,* at 4.50. Professor Munroe, Assistant Professor Swett.

24. Organic Chemistry. Advanced course. A continuation of Course 23. *Th., Sat.,* at 6.00. Professor Munroe, Assistant Professor Swett.

25. Chemistry of the Carbon Compounds. A laboratory couse in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Professor Munroe, Assistant Professor Swett.

26. Physical Chemistry. A lecture course designed to be an introduction to physical chemistry, and to treat of the modern theories of chemistry from the physical standpoint. In this course special attention is given to the ionic theory, electro-chemistry, the law of mass action, and the phase rule. Two hours. Assistant Professor McNeil.

27. Stereo-Chemistry. This course deals with the arrangements of atoms in space from a theoretical standpoint, while the student is taught how to form models by which to illustrate their arrangements. Two hours. Assistant Professor Hill.

28. Biochemistry. A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro*. Three three-hour periods. Assistant Professor Price.

30. Physiological Chemistry. A series of lectures and recitations on the proximate principles of the human body. Two hours for one term.

31. Clinical Analysis. A laboratory course to accompany 30. Professor Munroe, Assistant Professor Seibert.

Third Section. Primarily for Graduates.

50. Explosive Substances. Professor Munroe.

51. Analytical Methods. Professor Munroe.

53. Development of the Theory of the Constitution of the Natural Silicates. Professor Clarke.

54. Special Researches in Agricultural Chemistry. Professor Wiley.

55. Special Researches in Electro-Chemistry. Assistant Professor Hopkins.

Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington which are held on the second Thursday of each month from October to May, in the Assembly Hall of the Cosmos Club, at 8 p. m., and also the meetings of the Chemical Society of the George Washington University, which is a most active and efficient student organization.

CLASSICAL LANGUAGES AND LITERATURES.

Charles Sidney Smith, Ph.D.....Professor
Moses Walton Hendry, A.B., LL.B.....Assistant

Greek.

First Section. Primarily for Undergraduates.

A. Elementary Course. For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirement in Greek, with the exception of Homer. Three hours.

B. Homer: Iliad I-IV or Odyssey V-VIII. For students who have taken Course A and desire to prepare themselves to enter Course 1. Two hours. Not given in 1912-13.

1. Herodotus (selections): Lysias (selected orations); Euripides (Alcestis); Greek prose composition. *Mon., Wed., Fri.,* at 2.45.
2. Xenophon (Memorabilia); Thucydides (Book VII); Sophocles (Antigone). *Mon., Wed., Fri.,* at 11.15.

Second Section. For Undergraduates and Graduates.

20. Plato (selections, including the Apology and Crito); Aristophanes (Clouds or Frogs). Two hours. Not given in 1912-13.
21. Demosthenes (selected orations); Lucian (selected dialogues); Homer (selections). *Tu., Th.,* at 1.45.

Latin.

First Section. Primarily for Undergraduates.

1. Livy (Books I and XXI); Cicero (De Senectute); Horace (Odes and Epodes); Latin prose composition. *Mon., Wed., Fri.,* at 3.45.
2. Cicero and Pliny (selected Letters); Horace (Satires and Epistles); Martial (selections). *Mon., Wed., Fri.,* at 1.45.

Second Section. For Undergraduates and Graduates.

20. Tacitus. (selections); Terence (Phormio); Plautus (Captivi). *Tu., Th.,* at 11.15.
21. Roman Literary Criticism. Quintilian (Book X) and Horace (Ars Poetica); Catullus, Tibullus, and Propertius. Two hours. Not given in 1912-13.
22. Advanced Latin Composition and Reading at Sight. Practice in Latin expression and style. *Th.,* at 1.45.

Third Section. Primarily for Graduates.

The work in this Section is designed to afford discipline in the methods of philological criticism, with special reference to the interpretation of classical authors, and will include opportunities for original research on the part of competent students. In order to make the work as helpful as possible for those who expect to become teachers, the center of study each year will be one of the authors usually taught in the secondary schools. With the approval of the instructor, properly qualified Seniors may be admitted to these courses. The authors selected are as follows:

50. Virgil and Roman Epic Poetry. Not given in 1912-13.
51. Caesar, and the Roman Historians. Not given in 1912-13.
52. Cicero, and Roman Oratory. *Tu.,* 5-6.40.

ECONOMICS AND SOCIOLOGY.

HENRY PARKER WILLIS, Ph.D (absent during 1912-13).....Professor
CHARLES WILLIAM AUGUST VEDITZ, Ph.D.....Professor
ROBERT RUSS KERN, A.B.....Assistant Professor
JOHN BALL OSBORNE, A.M.....Lecturer
JOHN LEE COULTER, M.A.....Lecturer
JESSE E. POPE, Ph.D.....Lecturer

Second Section. For Undergraduates and Graduates.

20. GENERAL ECONOMICS.—An outline course in the principles of political economy, devoted mainly to the study of production and exchange under present-day conditions. Given in two sections. First half-year. *Mon., Wed., Fri.,* at 11.15 (Section *a*); at 5.50 (Section *b*), Assistant Professor KERN.

21. THE ECONOMICS OF DISTRIBUTION AND CONSUMPTION.—A continuation of Course 20, devoted mainly to the problems of rent, interest, wages, and profits, and including an examination of competition, private property, luxury, saving, and speculation, in their effects upon human welfare. Given in two sections. Second half-year. *Mon., Wed., Fri.,* at 11.15. (Section *a*); at 5.50. (Section *b*), Assistant Professor KERN.

22. GENERAL SOCIOLOGY.—An outline course in the principles of sociology, devoted mainly to the study of social origins and the development of existing social institutions, with special attention to social psychology. Two hours, first half-year. *Mon., Fri.,* at 5.00. Assistant Professor KERN.

23. MODERN SOCIAL PROBLEMS.—A further analysis of modern social conditions with special studies of current questions in sociology. Prerequisite, the course in general sociology. Two hours, second half-year. *Mon., Fri.,* at 5.00. Assistant Professor KERN.

24. THE HISTORY OF ECONOMIC THOUGHT.—A review of the development of economics as a science from the earliest times to the present. Lectures and library readings. Two hours, first half-year. *Tu., Th.,* at 5.00. Assistant Professor KERN.

25. CONTEMPORARY ECONOMIC THEORY.—An advanced course in the theory of economics in continuation of the preceding; a review of current economic doctrines with critical analysis. Two hours, second half-year. *Th.,* 5.00-6.40. Not given in 1912-13. Assistant Professor KERN.

25*a*. SOCIAL PSYCHOLOGY.—A study of the psychological nature of man; his instincts, feelings, and passions as social forces; an inquiry

into the development of these forces, and the reaction of the social mind upon the individual; an investigation of the theories of Giddings, Tarde, Ross, and McDougall. Second half-year. *Tu., Th.,* at 5.50. Assistant Professor KERN.

26. PUBLIC FINANCE.—A course in the development of budgetary and fiscal methods and principles. The history and tendencies of public expenditure under the Federal and State governments. The theory of taxation; administration of public domains, and industries; public debts. First half-year. *Tu., Th.,* at 8.00 A. M. Professor VEDITZ.

27. MONEY AND BANKING.—The history and theory of money; the production of the precious metals; the theory of prices and measurement of price fluctuations; monetary systems; the relation of the Treasury system to our money supply; the theory of credit and banking; the national bank system of the United States and the banking system of foreign nations. Second half-year. *Tu., Th.,* at 8.00 A. M. Professor VEDITZ.

28. ACCOUNTING.—General principles of accounting. A text-book on accounting and hand-books dealing with accounting forms and methods are used as guides. Much of the work is based upon library readings with suggested problems to be worked out and submitted. The course includes a study of the accounts of representative kinds of business and the methods of accounting applicable thereto. First half-year. *Mon., Fri.,* at 8.00 A. M. Professor WILLIS. Not given in 1912-13.

29. CORPORATION FINANCE.—The various sorts of corporation securities; methods of organizing and financing modern industrial enterprises; the nature of investment and speculation; stock and produce exchanges; the effect of speculative and investment operations on the staple industries. Second half-year. *Tu., Th.,* at 5.00. Professor VEDITZ.

30. THEORY AND PRACTICE OF STATISTICS.—A conference course in the principles of statistics, with concrete examples of their applications; the graphic method; the use of averages; index numbers; and the special application of statistics to insurance; government statistical methods and publications in the United States and in the principal foreign countries. Lectures and reading. Not given in 1912-13. Two hours, first half-year. Professor WILLIS.

31. INTERNATIONAL TRADE.—A discussion of the theory and mechanism of international trade; a survey of the commerce of the world; the commercial relations of the United States. Two hours, first half-year. *Tu., Sat.,* at 8.00 A. M. Mr. OSBORNE.

32. COMMERCIAL POLICIES.—Study of the trade and navigation policies of its principal commercial powers; organization and methods of their trade-promoting institutions; tariff systems of the world; history of American tariff legislation; commercial treaties and agreements of the United States; history of the policy of reciprocity; doctrine of the

most favored nation. Two hours, second half year. *Tu., Sat.,* at 8.00 A. M. Mr. OSBORNE.

33. COMMERCIAL AND MARITIME LAW.—An outline of the principles of the law relating to commercial transactions generally, including those peculiar to the sea, with more especial reference to the subjects of contracts, sales, bailments, agency, partnership, negotiable instruments, and common carriers. First half-year. *Tu., Th., Sat.,* at 5.00. Mr. LATIMER.

34. COMMERCIAL AND INDUSTRIAL HISTORY.—The rise and progress of commerce from antiquity to modern times, with particular emphasis on the effects of commerce upon civilization and the relations between commercial and political development. The rise and progress of economic activities in the English colonies of North America and of the agricultural, commercial, and industrial growth of the United States. First half-year. Not given in 1912-13.

35. MODERN BUSINESS ORGANIZATION.—A study of the modern business, the present modes of producing and distributing commodities, modes of controlling prices, systems of retailing, advertising, etc. Second half-year. *Wed.,* at 5.50. Professor VEDITZ.

36. COMMERCE, INDUSTRY, AND TRANSPORTATION OF THE UNITED STATES.—A study of the resources, industries, business activities, and internal and foreign commerce of the United States; the products of the various sections; the transportation systems by which they are interchanged or assembled for manufacturing and redistribution; manufacturing systems; domestic exchange; distribution to foreign countries; the markets in which exports are sold and from which imports are drawn. Two hours, first half-year. *Tu., Th.,* at 5.00. Professor VEDITZ.

37. COMMERCIAL GEOGRAPHY AND BUSINESS ORGANIZATION.—The products, industries, and commerce of the various countries and sections of the world; the exchanges between climatic sections and between the great producing and manufacturing sections and countries of the world; the staple articles of commerce, their places of production and sale; manufacturing industries and the distribution of their products; the transportation and financial systems by which interchanges are facilitated; a comparative view of the commercial, economic, and financial conditions in the various sections and countries of the world. Two hours, second half-year. *Mon., Wed., Fri.,* at 5.50. Mr. AUSTIN and Professor VEDITZ.

38. COOPERATION AND RURAL ECONOMICS.—Economic principles governing and comparative advantages of individual, corporate, and cooperative organization in ownership of land, water rights, and farm equipment; in production, manufacturing, storing, and marketing of agricultural products; in buying of farm equipment and supplies; in credit, insurance, telephone, etc. Problems of farm labor; size, owner-

ship, and value of farms, land titles, etc. Lectures, assigned readings, reports on special topics, quiz. First half-year. *Wed., Sat.,* at 8.00 A. M. Dr. COULTER.

39. AGRICULTURAL CREDIT.—The importance of agricultural credit and its relation to other forms of credit will be discussed. Its history and development in the leading European countries will be traced and special emphasis will be laid on agricultural banks and credit, the status of agricultural credit in the United States and the applicability of European methods. Lectures and assigned readings. Second half-year. *Wed., Sat.,* at 8.00 A. M. Dr. POPE.

40. TAXATION.—Taxation, its administration and organization. The legal problems which arise in connection with taxation will be studied through typical cases. Two hours, second half-year. Not given in 1912-13. Professor WILLIS.

41. ADVANCED ACCOUNTING.—A special study of accounting principles in their application to specified classes of business. Prerequisite—the course in accounting. Second half-year. *Mon., Fri.,* at 8.00 A. M. Professor WILLIS. Not given in 1912-13.

42. INSURANCE.—The historical development of insurance; its economic aspects; fire, accident, and life insurance from the standpoint of internal organization; rates; policies. Two hours. Second half-year. Not given in 1912-13. Professor WILLIS.

43. LABOR PROBLEMS.—A brief sketch of the labor movement in the United States and of the aims and methods of trade unions, followed by a discussion of such problems as: Child labor; dangerous occupations; workingmen's insurance against sickness, old age, accidents, and unemployment; strikes and industrial conflicts; conciliation and arbitration; collective bargaining. Two hours, second half-year. *Tu., Th.,* at 5.50. Not given in 1912-13. Assistant Professor KERN.

44. COMBINATIONS—TRUSTS.—A discussion of the conditions which have favored the growth of large business combinations, the nature of their organization, their influence upon prices and productive efficiency, and the regulation and supervision of them. Two hours, first half-year. *Tu., Th.,* at 5.50. Not given in 1912-13. Assistant Professor KERN.

Primarily for Graduates.

50. SEMINAR IN AGRICULTURAL ECONOMICS.—A research course, designed for students who desire to do work in Agricultural Economics, conducted by the seminar method. Assigned readings and lectures will be given, but the main object will be to encourage and direct students in individual research. Hours to be arranged. Dr. POPE.

51. SEMINAR IN SOCIOLOGY.—A research course for the detailed investigation of special sociological problems, suitable for those who are engaged in original investigation or in the preparation of a thesis. Hours to be arranged. Professor VEDITZ.

ENGINEERING.

EDWIN VIVIAN DUNSTAN, C.E.....Assistant Professor
OSCAR ALEXANDER MECHLIN, C.E.....Assistant Professor
FRANK CHARLES STARR, B.S.....Assistant Professor
CHARLES WARD MORTIMER, M.E.....Assistant Professor
HAYNER HASKELL GORDON, E.E., Ph.D.....Instructor
ROBERT WILBUR MORSE, S.B.....Instructor
MARK RITTENHOUSE WOODWARD, E.E.....Instructor

APPLIED MATHEMATICS.

Second Section. For Undergraduates and Graduates.

20. ANALYTICAL AND APPLIED MECHANICS. (1) Statics: including the composition, resolution, and equilibrium of forces; center of gravity; friction; machines. (2) Kinematics and Kinetics: including rectilinear and curvilinear motion; motion under action of variable forces and in resisting media; constrained and rotary motion; impact; work and energy; moment of inertia. Four hours a week, first half-year. Assistant Professor DUNSTAN.

21. HYDRAULICS. The theoretical principles of hydraulics: including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Four hours a week first half-year. Assistant Professor DUNSTAN.

22. MECHANICS OF MATERIALS AND THEORY OF ELASTICITY: including elastic and ultimate strength and deformation: simple cantilever and continuous beams; columns, torsion; combined stresses; compound columns and beams: including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours a week, second half-year. Assistant Professor DUNSTAN.

CIVIL ENGINEERING.

First Section. Primarily for Undergraduates.

1. SURVEYING AND MAPPING. This course includes the theory and use of instruments; land, topographic, hydrographic, mining, city, and geodetic surveying; measurement of volumes, prejection of maps, etc. The course includes plotting survey notes, typographic symbols, lettering. Two hours a week. Field work, usually on Saturday. One drawing period a week. Assistant Professor STARR.

2. RAILROAD ENGINEERING. Railroad curves and earthwork; location of about a mile of railroad; laying out curves; construction of contour

maps, profiles, mass diagrams, etc. Two hours a week recitation both terms and one period drawing second term; field work usually on Saturdays. Assistant Professor STARR.

3. HIGHWAYS AND PAVEMENTS. Location of highways; construction, improvement and maintenance of roads and pavements; curbs, gutters, sidewalks. Two hours a week during the second term. Assistant Professor MECHLIN.

4. MATERIALS OF CONSTRUCTION. A study of the properties of stone, brick, cement, concrete, wood, iron, steel, etc.,with reference to processes of manufacture. The course is supplemented by a number of practical tests made by the students. Two lectures and one laboratory period during first term. Assistant Professor MECHLIN.

5. SURVEYING INSTRUMENTS. A two-months' course for Mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours per week. Assistant Professor STARR.

6. FOUNDATIONS. A two-months' course for Mechanical and Electrical Engineering students, covering the general principles of foundation construction and the materials used. Two hours a week. Assistant Professor MECHLIN.

8. A COURSE IN PRACTICAL ASTRONOMY FOR CIVIL ENGINEERING STUDENTS. Special attention is given to the methods of determining latitude, longitude, azimuth and time with the engineer's transit; observations for each being a required part of the course. Two lecture-recitation periods per week for one term. Assistant Professor STARR.

9. MECHANICAL TESTING. A laboratory course in the investigation of the physical properties of engineering material, including exercises in the use of a 200,000 pound Olson Testing Machine. Eighteen periods of two (2) hours each in the second term.

Second Section. For Undergraduates and Graduates.

20. MASONRY CONSTRUCTION. A course in the use of cement, brick, stone, and concrete, the design of foundations, retaining walls, dams, bridge piers and arches. Included in this is a short course in stereotomy. Two lectures and two design periods per week. Assistant Professor MECHLIN.

21. HYDRAULIC ENGINEERING. The design and construction of water-power plants and irrigation works. Flow of rivers; rainfall and run-off; methods of development; hydraulic motors; power transmission. Irrigation plans; distributing system; water rights and irrigation law. Four lectures and two design periods per week, second term. Assistant Professor DUNSTAN.

22. THEORY OF STRUCTURES. A course covering the determination of stresses in framed structures by graphical and by analytical methods.

The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods per week. Assistant Professor DUNSTAN.

23. THEORY OF STRUCTURES. The theory of steel design; the design of a roof truss, of a plate girder and a pin connected bridge truss and a study of the theory and design of suspension, continuous, cantilever, and arch bridges, and the details of steel-mill and office-building construction. Three lectures and two design periods per week. Assistant Professor MECHLIN.

24. SANITARY ENGINEERING. This course treats on the drainage of buildings and lands; the treatment and disposal of sewage and the sewerage of cites and towns; public water supply and methods of water purification. Three lectures and one design period per week. Assistant Professor MECHLIN.

Third Section. Primarily for Graduates.

50. ADVANCED MASONRY. A course in the theory and design of reinforced concrete structures. Assistant Professor MECHLIN.

51. ADVANCED MASONRY. The theory of retaining walls and arches. Assistant Professor MECHLIN.

52. TESTING OF MATERIALS. This course involves orginal research upon assigned topics. Assistant Professor MECHLIN.

53. WATER-POWER DEVELOPEMENT. A comparative study of the principal water-power developments of the United States and Europe. The course consists largely of assigned readings and reports thereon. Assistant Professor DUNSTAN.

ELECTRICAL ENGINEERING.

First Section. Primarily for Undergraduates.

1. ELEMENTARY MATHEMATICAL THEORY OF ELECTRICITY AND MAGNETISM; Direct Current Motors and Generators; Design work; Elements of Electrical Engineering, and problems.

For about one-third of the session elementary electricity and magnetism is studied, with especial attention to the needs of engineering students. This is followed by a study of direct current generators and motors, covering the laws of the magnetic circuit as applied to the dynamo, and including the design of electrical apparatus and machinery. During the last part of the course a study of the elements of electrical engineering is taken up and an introductory study of alternating currents is begun. Numerous problems are assigned throughout the course. Five hours a week. Assistant Professor MORTIMER.

4. ELECTRICAL MEASUREMENTS. A laboratory course for Juniors. Se-

lected experiments. Foster's Hand-book and special laboratory notes are used for reference. Six hours a week, first term. Assistant Professor MORTIMER and Mr. WOODWARD.

5. ELECTRICAL LABORATORY. Experiments and tests involving the operation of direct-current dynamos and motors, including tests of motors in service, operating elevators, street cars, and machinery of various kinds. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering." Six hours a week, second term. Assistant Professor MORTIMER and Mr. WOODWARD.

6. INDUSTRIAL ELECTRICITY. A practical course intended for Juniors in Civil Engineering, embracing the selection and operation of electrical machinery, electrical railways and other applications of electric motors. Two hours a week for the first term. Mr. WOODWARD.

7. ELECTRICAL ENGINEERING. A course in theoretical and applied electricity intended for Seniors in Mechanical Engineering. It embraces the selection and operation of electrical machinery, the location, construction, and operation of power plants, electric railways and transmission lines, the use of electric motors for driving machinery, and the working of storage batteries, elevators, hoists, and cranes. Three hours a week. Mr. WOODWARD.

8. ELECTRICAL DESIGN. A course for Seniors in Electrical Engineering, embracing calculation and design of electrical machinery and accessories, including switchboards, rheostats, instruments, and arrangement of same. One recitation period and one drawing period throughout the year.

Second Section. For Undergraduates and Graduates.

21. ALTERNATING CURRENT THEORY AND MACHINERY. A course for Seniors in Electrical Engineering, covering the principles of single as well as polyphase currents, including study of machines, circuits, transformers, etc. Four hours a week. Assistant Professor MORTIMER.

22. ELECTRICAL DISTRIBUTION. A course for Seniors in Electrical Engineering, covering the whole field of distribution of electricity for light and power. Text-book: Crocker's Electric Lighting; second volumne, "Distribution System." Two hours a week. Assistant Professor MORTIMER.

23. ELECTRICAL APPLICATIONS. A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as motive power, including elevators, hoists and machine drive, telephony, telegraphy, electro-metallurgy, etc. One hour a week. Mr. WOODWARD.

24. ADVANCED LABORATORY WORK FOR SENIORS IN THE ELECTRICAL ENGINEERING COURSE. Covers test and experimental work with direct and alternating currents, tests of machines, circuits, transformers, circuits containing inductance and capacity, measurement of power in alternat-

ing current circuits, plotting of curves, etc. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering," with Foster's Electrical Engineer's Hand-book for general reference. Six hours a week. Assistant Professor MORTIMER.

25. INSPECTION OF PLANTS AND INDUSTRIAL WORKS. In the vicinity of Washington and Baltimore are a number of modern electric lighting and street railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written description submitted by the students.

26. ELECTRIC LIGHTING AND ILLUMINATION. A course for Seniors in Electrical Engineering covering the subject of electric lighting and illumination, including detailed study of different types of lamps, shades, arrangement of light sources, effect of walls, etc. Two hours per week, first term. Mr. WOODWARD.

27. ELECTRIC RAILWAYS. A course for Seniors in Electrical Engineering covering the theory and practice of modern, direct and alternating current railways. Two hours a week, second term. Assistant Professor MORTIMER.

28. HIGH FREQUENCY CURRENTS. A lecture course covering the theory of high frequency and oscillatory currents and their application to wireless Telegraphy and Telephony. The condenser discharge, the theory of resonance in coupled circuits, and electromagnetic waves will be treated. The design of wireless telegraph and telephone apparatus will also be discussed. The class will meet in the laboratory from time to time to familiarize themselves with the use of wireless apparatus. One period a week. Dr. GORDON.

Juniors and Seniors in Electrical Engineering are expected to attend the monthly meetings of the Washington Branch of the American Institute of Electrical Engineers.

Third Section. Primarily for Graduates.

52. ADVANCED COURSE IN THE MATHEMATICAL THEORY OF ALTERNATING CURRENTS. Assistant Professor MORTIMER.

53. ADVANCED COURSE IN POLYPHASE CURRENTS. Assistant Professor MORTIMER.

54. ADVANCED LABORATORY WORK, ALTERNATING (INCLUDING POLYPHASE) CURRENT APPARATUS. Assistant Professor MORTIMER.

55. ADVANCED ELECTRIC RAILWAYS. A course including a short history of electric railways, calculation of the theoretical curves, study of different systems and examples of modern installations. Philip Dawson's "Electric Traction on Railways" is used at a basis for the course. Assistant Professor MORTIMER.

Graphics.

First Section. Primarily for Undergraduates.

1. Mechanical and Freehand Drawing. A general course embracing the care and use of instruments; orthographic and isometric projections; sections and intersections; curve plotting; sketching of simple machine details; freehand lettering; principles of working drawings. Six hours a week in the drawing-room. Assistant Professor Starr.

2. Advanced Mechanical Drawing. A course in working drawings especially designed for Electrical and Mechanical Engineering students. Drawing-room rules and practice; conventional forms and standards; arrangement of views and sections; freehand shop-sketches; detailing from sketches, models and general drawings; proportioning by empirical formulas. Six hours a week in the drawing-room.

8. Descriptive Geometry. A study of the representation of lines, surfaces, and solids, and of their relations; tangencies, intersections, and developments; warped surfaces; shades and shadows; original construction problems. Two lectures and one drawing period per week. Assistant Professor Starr.

Third Section. Primarily for Graduates.

50. Advanced Graphic Statics. A study of the graphical analysis of higher structures, with special reference to the method of influence lines. Assistant Professor Dunstan.

Mechanical Engineering.

First Section. Primarily for Undergraduates.

1. Mechanism. A course in the systematic study of the kinematics of machinery, in which mechanical movements are reduced to scientific analysis. Carefully developed problems and diagrams of changes of position and speed in mechanisms are constantly used.

Some attention is given to the design of gear teeth, and twenty-five hours in the second term are devoted to valve gears for steam engines. Three lecture-recitation hours and two drawing hours per week during the Sophomore year. Mr. Morse.

6. Engineering Drawing. This course provides for the application of the principles taught in the courses of Mechanism and Steam Engineering to specific problems. Practice is given in the design of valve gears and quick return motions, and in the determination of velocity diagrams for special engine and other linkages. There is also included the complete working drawings for a steam boiler. Six drawing hours per week during the Junior year. Mr. Morse.

7. Machine Design. This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are: The design of a boiler; shafting; a series of shaft couplings; an automobile transmission, and a punching machine.

The constructive details and calculations are discussed and the limitations of theoretical and empirical formulas pointed out. One lecture-recitation hour and five drawing hours per week during the Senior year. Mr. Morse.

9. Engineering Laboratory. A course of practical work in testing general engineering apparatus for efficiency. The work consists in indicating steam engines; determining the evaporative efficiency of boilers; tests on the strength of materials; measurement of the flow of water; gas-engine brake tests; refrigeration tests, and fuel value determinations. Six laboratory hours per week for the last half of the Junior year. Mr. Morse.

10. Engineering Laboratory. This course is a completion of Course 9. Six hours a week during the Senior year.

Second Section. For Undergraduates and Graduates.

20. This course deals with the principles of thermo-dynamics; the properties of gases and vapors, especially steam, and the flow of steam through nozzles. The application of the above principles is discussed and the simple and compound steam engine and the steam turbine are studied. Three lecture-recitation hours per week during the first half of the Junior year. Dr. Gordon.

21. Boilers and Power Plant Accessories. This course is devoted to a study of Boilers, Condensers, Feed Pump, Economizers, Stokers, and other power-plant accessories. The design of power plants will be discussed. Three lecture-recitation hours per week for the last half of the Junior year. Dr. Gordon.

22. Gas Engines and Compression and Refrigeration Machinery. This course deals with the theory and practice concerning the internal combustion motor. During the second half of the term the theories and principles involved in compression machinery and artificial refrigeration will be discussed. Three lecture-recitation hours per week for the last half of the Senior year. Dr. Gordon.

23. Hydraulic Machinery. This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The course will aslo treat of impulse wheels; water motors of the piston type; machinery for the utilization of hydraulic pressure; hy-

draulic pressure pumps, and hydraulic presses; hydraulic tools; pumps operated by steam, electricity, or power; and high duty pumps and water meters. Two lecture-recitation hours per week for the first half of the Senior year. Mr. MORSE.

24. COTTON MACHINERY AND MACHINE TOOLS. A study of the mechanisms found in cotton machinery and machine tools. Two lecture-recitation hours per week throughout the Junior year. Mr. MORSE.

26. DYNAMICS OF MACHINES. A course including a number of the principal applications of Dynamics to moving machinery, such as governors, fly-wheels, and the effect of the reciprocating parts of the steam engine. Two lecture-recitation hours per week throughout the Senior year. Mr. MORSE.

27. POWER-PLANT DESIGN. This course provides for the design with complete plans and specifications of a power plant of industrial proportions by the student. One lecture-recitation hour and six drawing hours per week for the first half of the Senior year. Dr. GORDON.

28. INDUSTRIAL MANAGEMENT. A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the method of superintendence and of compensating labor, the determination of the cost of production, and the effect on costs of different systems of distributing indirect expenses. Two lecture-recitation hours per week for the last half of the Junior year. Mr. MORSE.

ENGLISH.

WILLIAM ALLEN WILBUR, A.M.....Professor
CHARLES WILLIAM AUGUSTUS VEDITZ, Ph.D.....Professor
EDWIN WILEY, Ph.D.....Lecturer

First Section. Primarily for Undergraduates.

1. ENGLISH RHETORIC. A study of the principles of self expression through language with practice in composition. *Tu., Th., Sat.*, at 10.15. Professor WILBUR.

2. ENGLISH RHETORIC. Parallel with Course 1. *Mon., Wed., Fri.*, at 5.00. Professor WILBUR.

NOTE.—Credit for Course 1 or 2 is requisite for admission to any other course in English.

3. HUMANISTIC STUDIES. Utopia; Ecclesiastical Polity, Book I; Areopagitica; Sense and Sensibility, Pride and Prejudice, Emma, Persuasion; The Pilot; The House of Seven Gables; The Marble Faun; Vanity Fair; Adam Bede, The Mill on the Floss; The Cloister and the

Hearth; The Merry Men; The English Sonnets. *Tu., Th., Sat.*, at 9.15. Professor WILBUR.

4. HUMANISTIC STUDIES. Advancement of Learning, Book I; Hydriotaphia; Kenilworth, The Heart of Midlothian; The Federalist; The Deerslayer, The Last of the Mohicans, The Pathfinder; The Scarlet Letter; The English Mail Coach; Dombey and Son; The Newcomes; Barchester Towers; Travels with a Donkey, An Inland Voyage; The Chief American Poets. *Mon., Wed., Fri.*, at 5.50. Professor WILBUR.

Second Section. For Undergraduates and Graduates.

20. ENGLISH COMPOSITION. An advanced course. *Tu., Th.*, at 11.15. Professor WILBUR.

22. SHAKESPEARE. The Comedies. *Mon., Wed., Fri.*, at 1.45. Professor WILBUR.

23. SHAKESPEARE. The Tragedies. Not given in 1912-13.

The Temple edition of Shakespeare is recommended.

25. THE PRELUDE (First Term). Paradise Lost (Second Term). *Tu., Th., Fri.*, at 3.45. Professor WILBUR.

28. DEBATING. The principles of argumentation with special reference to the formal and informal discussion of controverted problems in the field of economics and politics. First half year, *Tu., Th.*, at 5.50. Professor VEDITZ.

30. DEBATING. The Technique of Debate. An advanced course in the collection and preparation of material for the purpose of debate, the tactics of presentation and refutation, and the general strategy of public debate. Second half-year, *Tu., Th.*, at 5.50(This course may be taken as a one-hour course, *Tu.*, at 5.50). Professor VEDITZ.

Third Section. Primarily for Graduates.

54. ENGLISH SEMINARY. Graduate students engaged in individual research will discuss assigned topics in a seminary of English studies, meeting each week at an appointed time.

GEOLOGY AND MINERALOGY.

GEORGE PERKINS MERRILL, Ph.D.....Professor
RAY SMITH BASSLER, Ph.D.....Assistant Professor

First Section. Primarily for Undergraduates.

1. MINERALOGY. Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the

practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. *Tu., Th.,* at 5.50.

2. GEOLOGY. Systematic geology; dynamical, structural and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Text-books: Blackwelder and Barrows' elements of Geology; Merrill's Rocks, Rock Weathering, and Soils. *Mon., Fri.,* at 5.50.

3. PHYSICAL GEOGRAPHY. A general culture course of lectures, laboratory and field work, treating of the earth as a globe, the atmosphere, the oceans and the lands; one hour per week. *Tu.,* at 5.00.

Second Section. Primarily for Undergraduates and Graduates.

20. ECONOMIC GEOLOGY. [Geology 1 and 2 and Chemistry 1 are prerequisite for this course.] The course covers the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc; and (3) the non-metallic minerals as the coals and hydrocarbon compounds; salts and materials used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones, building stones, limes, cements, and mineral waters. Text-books: Weed's Translation of Beck's Nature of Ore Deposits; Merrill's Stones for Building and Decoration and The Non-Metallic Minerals. *Mon., Fri.,* at 5.00.

21. PALEONTOLOGY. A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology.

Third Section. Primarily for Graduates.

Advanced study in Geology, both systematic and applied, is arranged to cover two years.

50. ADVANCED GEOLOGY AND PALEONTOLOGY. The student in this first-year course may devote his time largely, if necessary, to perfecting himself in methods; to general work in the laboratory and in the field; to the examination of geological materials, and to familiarizing himself with the literature of the subject.

51. ADVANCED PALEONTOLOGY AND STRATIGRAPHIC GEOLOGY. A continuation of Course 21. Besides the study of paleontological methods, the student is expected to pursue some special line of investigation in order to fit himself for original research.

GERMANIC LANGUAGES AND LITERATURE.

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor

First Section. Primarily for Undergraduates.

1. ELEMENTARY. The essentials of German grammar; translation of prose and poetry; composition and dictation. This course is open only to beginners, and the work done is equivalent to that of a two years' course in high schools and academies of good standing. *Tu., Th., Sat.,* at 11.15. Professor SCHOENFELD.

2. Parallel with Course 1. *Tu., Th., Sat.,* at 5.00. Professor SCHMIDT.

3. Selected texts from the best contemporary authors will be read and one or more of the German classics carefully studied. The work in grammar and composition done in elementary German will be continued, with special emphasis on syntax, word-formation, and the relationship of German and English. This course is equivalent to the advanced German of the admission requirements, and it is open only to students who have passed Course 1 or 2, or have satisfied the admission requirement in elementary German. *Mon., Wed., Fri.,* at 11.15. Professor SCHOENFELD.

4. Parallel with Course 3, except that in the second term scientific German is read. *Tu., Th., Sat.,* at 5.50. Professor SCHMIDT.

5. Advanced course in German syntax; principal difficulties of the language; idioms; synonyms; extensive translations of the best English prosaists into German; essays; selected advanced prose; classical reading and literature; German history. Open to students who have passed Course 3 or have satisfied the admission requirement in advanced German. *Mon., Wed., Fri.,* at 1.45. Professor SCHOENFELD.

6. Parallel with Course 5, with special reference to advanced students both in the historico-political and the scientific departments. *Tu., Th.,* at 5.00. Professor SCHOENFELD.

Second Section. For Undergraduates and Graduates.

20. HISTORY OF GERMAN LITERATURE FROM THE MIDDLE HIGH GERMAN PERIOD TILL 1748. Collitz's Selections and Priest's German Literature. Lectures, readings, essays. *Mon., Wed., Fri.,* at 10.15. Professor SCHOENFELD.

21. GERMAN LITERATURE OF THE CLASSIC PERIOD AT ITS ZENITH. Goethe's and Winckelmann's influence on German art; with special reference

to the modern German Drama; Hebbel, Ludwig, Laude, Freytag, Ludermann, Fulda, Hauptmann. *Tu., Th., Sat.*, at 10.45. Professor SCHOENFELD.

Third Section. Primarily for Graduates.

50. EPIC AND LYRICAL POETRY IN THE TWELFTH AND THIRTEENTH CENTURIES, as exemplified in the Nibelungenlied and in Walter von der Vogelweide. Professor SCHOENFELD.

51. GOTHIC. Introduction to comparative Indo-European Grammar. Two hours. Professor SCHMIDT.

52. OLD HIGH GERMAN. The development of the German language. Two hours. Professor SCHMIDT.

Only one of the foregoing two courses (51, 52) is given in any one year.

For notice of the Richard Heinzel Germanic Library, see page 38.

HISTORY.

CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor
LEVI RUSSELL ALDEN, A.M.....Assistant Professor
GEORGE MORTON CHURCHILL, A.M.....Instructor
LESLIE CLEVELAND MCNEMAR, A.B.....Instructor
JOSEPH PLASS, A.M.....Instructor
HAROLD KEATS, A.B.....Assistant

First Section. Primarily for Undergraduates.

1. MEDIAEVAL HISTORY. A history of the settlement of the Germanic tribes in the territory of the Empire, with a study of feudal institutions through the movements of the Crusades; texts, with assigned readings. First half-year. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

2. MEDIAEVAL HISTORY. A history of the evolution of national government through the periods of the Rennaissance and the Protestant Revolution; texts and assigned readings. Second half-year. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

3. MODERN EUROPEAN HISTORY. A study of the European States under the new conditions resulting from the discovery of America and the opening of the oriental trade routes, extending through the period of the French Revolution; texts, lectures, and collateral readings. First half-year. *Mon., Wed., Fri.*, at 3.45. Professor SWISHER..

4. A continuation of the preceding through the revolutionary movements of the nineteenth century, with a more detailed study of recent issues; tests lectures, and collateral readings. Second half-year. *Mon. Wed., Fri.*, at 3.45. Professor SWISHER.

Second Section. For Undergraduates and Graduates.

23. European History, 1815 to 1870. Text-book, lectures, and reports on collateral reading. Besides the history of Europe proper much attention is given to matters of larger European interests, especially to colonization and international relations with reference to South America, Asia, and Africa. First half-year. *Mon., Wed., Fri.,* at 5.50. Mr. McNemar.

24. European History, 1870 to the Present. Continuation of the preceding, studying the most recent developments with special attention to the forms of government, political questions, and current issues. Second half-year. *Mon., Wed., Fri.,* at 5.50. Mr. McNemar.

25. English Constitutional History. A history of the evolution of parliamentary government, with incidental study of social and industrial development. *Mon., Wed., Fri.,* at 5.00. Mr. Churchill.

26. American Political History. A general course in American History designed as a preparation for specialized work, or for students having a limited time to devote to the subject. Lectures, text-books, and reports upon assigned readings. *Tu., Th.,* at 2.45, with a third hour at the convenience of the instructor. Professor Swisher.

30. American Constitutional History. A history of the origin and development of the Federal Constitution of 1789, with a study of its interpretation under the pressure of party issues, extending through the periods of division and reunion. Lectures, text-books, and collateral readings. *Mon. and Fri.,* at 5.00, in alternate years. Not given in 1912-13.

31. American Constitutional History since the Civil War. The constitutional results of the Civil War, as illustrated in the decisions of the Supreme Court during the past half century. *Tu.,* and *Th.,* at 3.45, with an additional hour at the convenience of the instructor, in alternate years. Not given in 1912-13.

32. A History of Party Government. The development of the party system and the influence of party leaders and party issues in the United States; a research course based upon the study of political platforms and campaign literature. *Tu.,* and *Th.,* at 5.00, with an additional hour at the convenience of the instructor. Professor Swisher.

33. Current History. A discussion of political questions of the day, with special reference to their origin and historical significance. Lectures throughout the year. *Sat.,* at 11.15. Professor Swisher.

Third Section. Primarily for Graduates.

54. Seminary Work. The results of individual research, conducted by graduate students upon assigned topics, will be discussed at the weekly meetings of the seminaries of American and Modern European History.

Undergraduate students properly qualified by previous study, who desire to do intensive work with a view to gaining fuller information upon special periods or facility in the use of historical materials, may, with the approval of the instructor, be admitted to the historical seminaries.

INTERNATIONAL LAW AND DIPLOMACY.

CHARLES HERBERT STOCKTON, LL.D.....In charge of Department
CHARLES CLINTON SWISHER, LL.D.....Professor
LESLIE CLEVELAND MCNEMAE, A.B.....Assistant Professor
JOHN BALL OSBORNE, A.M.....Lecturer
CLEMENT LAYTON BOUVE, A.B.....Lecturer

Second Section. For Undergraduates and Graduates.

20. PRINCIPLES OF INTERNATIONAL LAW.—A detailed course in the nature, sources, and sanctions of International Law, based upon the study of cases and reports, supplemented by letters and assigned readings. Throughout year. *Mon., Wed., Fri.,* at 5.00. A series of lectures by President STOCKTON occupying about one-fourth of the class meetings, with text-book and case instruction by Assistant Professor MCNEMAR during the remainder of the class hours.

21. THE ELEMENTS OF DIPLOMACY.—A study of the genesis and organization of the Department of State; the diplomatic service; diplomatic usage; negotiation of treaties; methods and traditional principles of our foreign policy. Second half-year. *Tu., Sat.,* 5.50. President STOCKTON and Assistant Professor MCNEMAR.

22. THE CONSULAR SERVICE.—The history and development of the Consular Service of the United States; its present organization; the rights, duties, and methods of procedure of consular officers; the consular conventions of the United States; comparative study of modern consular establishments. Two hours, first half-year. *Tu., Fri,* at 8 a. m. Mr. OSBORNE.

29. HISTORY OF AMERICAN DIPLOMACY.—A general history of American foreign relations from the Treaty with France in 1778, with a special study of some of the more important questions of American foreign policy. A research course with readings from treaties and diplomatic correspondence. Throughout the year. *Mon., Fri.,* at 2.45. Professor SWISHER.

Third Section. Primarily for Graduates.

54. CONFLICT OF LAWS OR PRIVATE INTERNATIONAL LAW.—A course dealing with private laws in its international aspects. Among the topics treated are marriage and divorce, guardianship, wills, and the administration of estates, bankrupcy, and foreign judgments. Open only to students who have had instruction in the fundamental subjects of American Law. Four hours, second half-year. Professor GREGORY.

MATHEMATICS.

HOWARD LINCOLN HODGKINS, Ph.D. Professor
ASAPH HALL JR., Ph.D. Professor
H. GRANT HODGKINS, A.B. Instructor
WILLIAM WRIGHT FRASER, A.B., B.L. Lecturer

First Section. Primarily for Undergraduates.

3. SOLID GEOMETRY; COLLEGE ALGEBRA; PLANE TRIGONOMETRY. *Mon., Wed., Fri.,* at 9.15. Professor HODGKINS.

4. ALGEBRA; PLANE TRIGONOMETRY. *Mon., Wed., Fri.,* at 5.00. Mr. HODGKINS.

6. SOLID GEOMETRY; COLLEGE ALGEBRA; PLANE TRIGONOMETRY. *Mon., Wed., Fri.,* at 5.50. Mr. HODGKINS.

9. TRIGONOMETRY; ANALYTIC GEOMETRY. *Mon., Wed., Fri.,* at 10.15. Professor HODGKINS.

12. TRIGONOMETRY; ANALYTIC GEOMETRY. *Mon., Wed., Fri.,* at 5.50. Professor HODGKINS.

Second Section. For Undergraduates and Graduates.

20. DIFFERENTIAL AND INTEGRAL CALCULUS; Elements of Differential Equations. *Tu., Th., Sat.,* at 5.00. Professor HODGKINS.

21. DIFFERENTIAL AND INTEGRAL CALCULUS; Elements of Differential Equations. *Tu., Th., Sat.,* at 9.15. Professor HODGKINS.

Third Section. Primarily for Graduates.

50. DIFFERENTIAL EQUATIONS. Professor HODGKINS.

58. CELESTIAL MECHANICS. Theory of central forces; theory of parabolic and elliptic orbits. Lectures, with reading from the works of Gauss, Oppolzer, and Moulton. Professor HALL.

59. VECTOR ANALYSIS. This course is designed to give the elements of an analysis based chiefly on the method of the late Prof. Gibbs (of Yale), but extended so as to embrace the quaternion idea. Application is made to problems in both Geometry and Physics, including vector calculations applied to alternating currents. Mr. FRASER.

METEOROLOGY.

WILLIS LUTHER MOORE, D.Sc., LL.D. Professor
WILLIAM JACKSON HUMPHREYS, Ph.D. Professor

Third Section. Primarily for Graduates.

50. Applied Meteorology. Investigation of the underlying laws governing meteorological phenomena and of the methods employed in practice for their interpretation and applications. Professor Moore.

51. Meteorological Physics. This course presupposes collegiate training in general physics. Particular attention will be given to the interpretation of meteorological phenomena in the light of modern physics; and those wishing to make this their principal study will be assisted in the selection of a suitable problem for investigation and advised in the collection of data necessary to its solution. Professor Humphreys.

PHILOSOPHY, PSYCHOLOGY, AND EDUCATION.

Williston Samuel Hough, Ph.M.....Professor
William Carl Ruediger, Ph.D.....Professor
Willard Stanton Small, Ph.D.....Lecturer
Stephen Elliott Kramer, A.M.....Lecturer
Fletcher Bascom Dresslar, Ph.D.....Lecturer

First Section. Primarily for Undergraduates.

1*a*. General Psychology. An introductory study of the principal facts and laws of the mental life. First half-year. *Mon., Wed., Fri.*, at 10.15. Professor Hough.

1*b*. General Psychology. Parallel with Course 1*a*. First half-year. *Mon., Wed., Fri.*, at 5.00. Professor Hough.

2*a*. Logic and Theory of Knowledge. Principles of deductive and inductive inference, followed by a study of the nature and structure of knowledge, its organization, and its relation to language. Second half-year. *Mon., Wed., Fri.*, at 10.15. Professor Hough.

2*b*. Logic and Theory of Knowledge. Parallel with Course 2*a*. Second half-year. *Mon., Wed., Fri.*, at 5.00. Professor Hough.

(Courses 1 and 2 are intended to satisfy the requirements in Psychology and Logic of Groups I to V, (pp. 70-71). They are introductory to the remaining courses in Philosophy and Education, and should be taken in the Sophomore year by students intending to pursue advanced courses or courses in Education. Courses 1*b* and 2*b* are given in alternate years. Not given in 1912-13.

3. General Psychology. Designed specially for teachers in service. *Tu., Th.*, at 5.00. Professor Ruediger.

(Normal School graduates and teachers of experience may take Course 3 instead of Courses 1 and 2 in satisfaction of the requirement in Psychology and Logic.)

Second Section. For Undergraduates and Graduates.

20. History of Philosophy. The chief epochs in the history of thought, with emphasis on their significance in the progress of civilization. Lectures, with assigned reading. First half-year. *Mon., Wed., Fri.,* at 11.15. Professor Hough.

21. Ethics. An introductory study of moral conduct. Second half-year. *Mon., Wed., Fri.,* at 11.15. Professor Hough.

(Courses 20 and 21 should be preceded by Courses 1 and 2, or an equivalent.)

22. Introduction to Philosophy. Lectures on the relation of philosophy to life and to the history of culture; and on the types of philosophical theory, with special reference to modern systems. Assigned reading, and discussions. Open to those who have had General Psychology. *Th.,* at 5.00. Not given in 1912-13. Professor Hough.

23. Greek and Modern Ethics, with special reference to the problems of moral education. Critical reading of selected Dialogues of Plato and the Ethics of Aristotle (Peter's translation), with lectures on modern systems of ethics and on the principles of moral education. *Mon.,* at 5.00. Professor Hough.

24. History of Philosophy. The evolution of philosophic thought in relation to the progress of civilization and the interpretation of human life. Lectures, with collateral reading. *Tu., Th.,* at 5.00. Professor Hough.

25. Experimental Psychology. An introductory laboratory course. Experiments on sensation, movement, learning, effects of practice, memory, association, emotional manifestations, etc. *Mon.,* 4.00-5.50. Professor Ruediger.

(Course 25 should preferably be preceded by General Psychology, but may be taken parallel with either Course 1 or Course 3. The course in Experimental Psychology and Course 50 in Education will not both be given.)

26. Ethics. Seminary course. A critical study of the historical systems of morals. Lectures, reports upon assigned reading, and discussions. *Mon.,* 4.00-5.50. Not given in 1912-13. Credit two hours. Professor Hough.

Third Section. Primarily for Graduates.

50. The Principles of Psychology. A seminary course for the advanced study of fundamental problems. Designed for graduates taking a major or minor in Psychology. Open to undergraduates who obtain the permission of the instructor. Hours to be arranged. Credit, two hours. Professor Hough.

53. Elements of Metaphysics. Selected fundamental problems. Designed for graduates taking a major in Philosophy. One hour. Professor Hough.

EDUCATION.

Course 1 or 2 in General Psychology and Logic must precede, or be taken parallel with, the first course in Education; but Normal School graduates and teachers of experience may satisfy this requirement by taking Course 3 in General Psychology. The systematic work in Education should begin either with the Principles of Education and of Teaching (Courses 21*a* and 21*b*), or with the History of Education (Course 22). Candidates for the Teacher's Diploma are required to complete before graduation Courses 21 (*a* and *b*); 22; 23 and 24, or 25; 30 (*a* and *b*), and 31. But teachers of experience may substitute an elective in Education, counting 2 units, for Course 31.

20. The Elements of Teaching. An introductory course dealing with some of the fundamental conditions which determine proper methods of teaching in the elementary grades. The problems of mental growth, and the demands such growth make upon the teacher and upon society, will be considered in an untechnical way. Designed especially as a first course for grade teachers. *Tu., Th.*, at 5.00. Dr. Dresslar.

21*a*. Principles of Education. The basis, aims, values, and essential content of education as revealed by biological, psychological, sociological, and ethical principles. First half-year. *Tu., Th.*, at 4.00. Professor Ruediger.

21*b*. Educational Psychology or Principles of Teaching. The fundamental principles underlying the teaching process as revealed by psychology and logic. Second half-year. *Tu., Th.*, at 4.00. Professor Ruediger.

(Courses 21*a* and 21*b* may be also taken with an additional hour's credit for extra reading.)

22. History of Education. A general course in the historical development of educational theory and practice. *Sat.*, 10.15-12.15. Professor Ruediger.

23. Child Study. The psychology, physiology, and hygiene of childhood and adolescence, with special reference to the problems of teaching. Kirkpatrick's *Fundamentals of Child Study*, supplemented by lectures, assigned reading, and reports. *Sat.*, 10.15-11.15. Dr. Small.

24. School Sanitation and Hygiene. A survey of the relations of education and health, including: The function of the school in promoting health; physical examination of children; medical inspection; physical education; diseases and defects incident to school life; the organization of instruction as related to fatigue; defective children; schoolhouse construction and sanitation. Lectures, reference work, and reports. *Sat.*, 11.15-12.15. Dr. Small.

25. Secondary Education. A practical course for actual or prospective high-school teachers, considering the history and function of American and foreign secondary education, and the values, essential content, and method of presentation, of the high school branches. *Wed., Fri.*, 4.00. Professor Ruediger.

26. Elementary Education. The following topics will be considered: (*a*) Comparison of the German, French, English, and American elementary education; (*b*) the relation of the elementary school to society and to the high school; (*c*) ways and means of securing realness in teaching the various elementary school branches; (*d*) the development of initiative and self-reliance in the elementary school pupil. *Wed., Fri.*, at 4.00. Not given in 1912-13. Professor Ruediger.

(Courses 25 and 26 will be given in alternate years.)

27. School Administration. The public school system: Its development; economic and political relations; organization of administration, financial and educational; problems of administration. Lectures, assigned reading, and reports. *Sat.*, at 9.15. Dr. Small.

28. Experimental Education. After a brief introduction to the experimental investigation of sensation, movement, and association, this course will be devoted to experiments in educational psychology. Among the topics to be investigated will be: habit formation; memorizing; the transfer of practice; the effectiveness of various motives in study; the effectiveness of different methods of presentation; the application of the Binet tests. *Mon.*, at 4.00-5.50. Not given in 1912-13. Professor Ruediger.

30*a*. Class Management. A consideration of the practical problems of the class-room, including economy in class management, attendance, discipline, physical conditions, the daily program, and the technique of class instruction. Class discussions, lectures, and assigned readings. *Wed.*, 5.00. First half-year. Mr. Kramer.

30*b*. School Supervision. A course involving the study of the relations of teachers to supervising officers, the principles of helpful criticism, the testing of class work, the conducting of teachers meetings, and the rating of teachers. Class discussions, lectures, and assigned readings. *Wed.*, at 5.00. Second half-year. Mr. Kramer.

31*a*. Observation. Both the application of general educational principles and the methods of teaching particular subjects are systematically observed and discussed. First half-year. Two hours. Hours to be arranged. Professor Ruediger.

31*b*. Practice. The student-teacher is led in particular to form the connection between theory and practice and to establish right teaching habits. Second half-year. Two hours. Hours to be arranged. Professor Ruediger.

(Course 31 is open only to students registered in Teachers College.)

32. Adolescence. A consideration of the psychology of adolescence,

with special reference to the problems of secondary education. Lectures, readings, and special topics. *Sat.*, at 9.15. (Courses 27 and 32 will not both be given.) Dr. SMALL.

Third Section. Primarily for Graduates.

50. ADVANCED EDUCATIONAL THEORY. Among the topics considered will be the quantification and experimental study of education; retardation and the application of the Binet tests; statistical methods; significant periodical literature; the social implications of education. The course will include some laboratory work, and each student will be expected to investigate and report upon some special topic.

Open to qualified undergraduates upon consultation with the instructor. *Mon.*, 4.00-5.50. Two hours credit. Professor RUEDIGER.

(See Course 25 in Psychology.)

PHYSICS.

HOWARD LINCOLN HODGKINS, Ph.D.....Professor
PERLEY GILMAN NUTTING, Ph.D.....Assistant Professor
HAYNER HASKELL GORDON, Ph.D.....Instructor
CHARLES EDWIN VAN ORSTRAND, M. S.....Lecturer
HARVEY LINCOLN CURTIS, Ph.D.....Lecturer

First Section. Primarily for Undergradutes.

1. GENERAL PHYSICS. A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experiments. This is a required course for Sophomores in Engineering, and may be elected by the general student who has had a college course in trigonometry. *Mon., Wed., Fri.*, at 5:00. Professor HODGKINS.

2. LABORATORY PHYSICS. A selected series of experiments, mainly quantitative. Two two-hour periods. *Tu., Th.*, at 10:15 or *Tu., Th.*, at 7:30. Professor HODGKINS and Dr. GORDON.

3. INTRODUCTORY GENERAL PHYSICS. A lecture and recitation course, similar to Course 1, but less mathematical, and planned with reference to the needs of the general student. *Mon., Wed., Fri.*, at 1:45. Professor HODGKINS.

Second Section. For Undergraduates and Graduates.

21. HEAT. A lecture and laboratory course, based on Preston's Theory of Heat and Poynting and Thomson's Heat. Three periods. Not given in 1912-13.

22. Light. A lecture and laboratory course, based on Preston's Theory of Light and Schuster's Theory of Optics. Three periods. Not given in 1912-13.

Third Section. Primarily for Graduates.

55. Spectroscopy. An experimental study of the flame, arc, spark, and vacuum tube spectra of the chemical elements; variations in spectra produced by varying excitation; spectra of mixed gases and alloys; identification of elements; photography of spectra. Assistant Professor Nutting.

57. Kinetic Theory. The physical properties of gases discussed from the standpoint of General Dynamics. Free path phenomena including viscosity, diffusion, heat conduction, and molecular aggregation and dissociation. Jean's Dynamical Theory of Gases. A lecture and seminar course. *Mon.* at 4.50. Mr. Van Orstrand.

58. Elasticity. The physical properties of solids as applied to problems in geophysics. The theories of homogeneous stress and strain. Potential energy of strained solids. Transmission of force. Propagation of earthquake waves. Love's Mathematical Theory of Elasticity. A lecture and seminar course. *Mon.*, 4.50. Not given in 1912-13. Mr. Van Orstrand.

59. Theoretical Electricity. A lecture course on the Mathematical theory of Electricity, using J. J. Thomson's Elements of Electricity and Magnetism as a basis. The fundamental propositions of Electrical theory are discussed, and their applications to practical problems are pointed out. The solution of a number of problems is also required. Dr. Curtis.

POLITICAL SCIENCE.

John Wilmer Latimer, LL.B.....Assistant Professor
Blaine Free Moore, A.M.....Assistant Professor
Leslie Cleveland McNemar, A.B.....Assistant Professor
John Ball Osborne, A.M.....Lecturer

For Undergraduates and Graduates.

20. Elements of Political Science.—An introductory course in political science, dealing with the origin, nature, and functions of the State; the fundamental political concepts such as the State, sovereignty, government, law, civil liberty; the forms of State; the forms of government; distribution of the powers of government. Recommended as a prerequisite for the succeeding courses. Text-book and assigned reading. Three hours, first half-year. *Mon., Wed., Fri.*, at 5.00. Assistant Professor Moore.

21. American Government. A general introductory course to American Government. The establishment of the Federal Constitution; a descriptive study and general survey of the national government and a more detailed study of the State and local governments. Lectures, text and assigned readings. Three hours, first half-year. *Mon., Wed., Fri.,* 5.50. Assistant Professor Moore.

22. National Government. A continuation of the preceding course. A detailed study of the federal government taking up the executive, Congress and the judiciary. Lectures, text and assigned readings. Three hours, second half-year. *Mon., Wed., Fri.,* at 5.50. Assistant Professor Moore.

23. Municipal Government in the United States.—A study of the organization and administration of city government in the United States with a limited comparative study of European conditions. The growth of cities; their relation to the State; powers and liabilities of municipal corporations; municipal problems such as those relating to local transportation, police, light and water supply, municipal ownership of public utilities. Three hours, first half-year. *Mon., Wed., Fri.,* at 1.45. Assistant Professor Moore.

24. Municipal Government in Europe.—The legal position of the European City; its powers and liabilities; governmental organization and methods of administration; municipal problems in Europe and their treatment; municipal ownership. Three hours, second half-year. Not given in 1912-13. Assistant Professor Moore.

25. European Governments.—A study of the organization and actual workings of the governments of France, Germany, Italy, Switzerland: a discussion of the executive, legislative, and judiciary and internal political conditions of each country. Lectures and assigned readings. Three hours, second half-year. *Mon., Wed., Fri.,* at 5.00. Assistant Professor Moore.

26. American Political Theories.—A study of the development of American political ideas. Political theories of the colonial, the revolutionary, and the formative period; the growth of democratic ideas; political theories of the slavery and Civil War controversies; modern political theories in the United States. Two hours, second half-year. Not given in 1912-13. Mr. McNemar.

27. Political Parties.—A study of the organization and methods of action of political parties in the United States. Growth of the party system; primary and convention system; permanent party organization; elements of cohesion in parties; reform movements and measures; theory of the party system. Prerequisites courses 20-21. Three hours, first semester. *Mon., Wed., Fri.,* at 9.15. Mr. McNemar.

28. Comparative Constitutional Law.—A comparative study of the constitutional and governmental forms of the United States, Great Britain, France, and Germany as representative types of modern con-

stitutional government; a comparison of the contitutional powers of the more important Federal governments. Two hours, first half-year. Not given in 1912-13. Assistant Professor MOORE.

40. ADMINISTRATIVE LAW AND OFFICERS.—Administrative action; exercise of official powers; discretion; orders; enforcement; evidence. Judicial control; action against officers, municipal corporations, and the State; extraordinary legal remedies. Public officers; nature of office; eligibility; appointment, removal; execution of authority; liability. Freund's Cases on Administrative Law. Three hours, second half-year. *Mon., Wed., Fri.*, at 9.15. Mr. MCNEMAR.

41. CONSTITUTIONAL LAW. A course dealing with the fundamental principles of constitutional law; a study of cases showing the relation between the federal and state governments; constitutional powers of the federal government; power and limitations of the states in regard to commerce, police, taxation, etc. Lectures and case book. Two hours, second half-year. *Tu.*, 5.00-6.40. Assistant Professor MOORE.

42*a*. COLONIAL GOVERNMENT.—A historical review of the colonial system and policies of the world; reasons for colonial expansion; the theory of the relationship between States and their colonies; the institutions and methods devised by the central government for colonial administration and control. Lectures and assigned readings. Two hours, first half-year. Not given in 1912-13. Assistant Professor MOORE.

42*b*. COLONIAL ADMINISTRATION.—A study of the executive, legislative, and judicial organization and the administration of laws in existing colonies; an investigation of the industries, labor, and education in these colonies. The organization and administration of the insular possessions of the United States. Lectures and assigned readings. Two hours, second half-year. Not given in 1912-13. Assistant Professor MOORE.

Primarily for Graduates.

56. SEMINAR IN POLITICAL SCIENCE.—Students competent to undertake advanced work along special lines are admitted to this seminar for the presentation and discussion of essays on topics belonging to the field of political science proper. Hours and credit to be arranged. Assistant Professor MOORE.

ROMANCE LANGUAGES AND LITERATURES.

GEORGE NEELY HENNING, A.M.....Professor
WALTER EDGAR HANCOCK, A.B.....Assistant

FRENCH.

First Section. Primarily for Undergraduates.

1. GRAMMER, composition, drill in pronunciation. Fraser and Squair's French Grammar. Translation and reading of nineteenth century fiction and history. (400-500 pages.) For beginners. *Mon., Wed., Fri.*, at 11.15. Professor HENNING.

2. Parallel with Course 1. *Tu., Th., Sat.*, at 5.00. Professor HENNING.

4. TRANSLATION, reading, grammar, composition. Fraser and Squair's French Grammar. Feuillet, *le Roman d'un jeune homme pauvre;* other texts to be announced. Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French. *Tu., Th., Sat.*, at 5.00. Professor HENNING.

6. GENERAL SURVEY OF FRENCH LITERATURE, nineteenth to seventeenth centuries. Translation, collateral readings, and reports thereon, lectures on literature and the history of the language, composition. Open to students who have passed in Course 4, or have fulfilled the admission requirements in Advanced French. *Mon., Wed., Fri.*, at 3.45. Professor HENNING.

Second Section. For Undergraduates and Graduates.

Courses in this group are open to students who have passed in Course 6, or who otherwise satisfy the instructor of their fitness to take them.

21. SEVENTEENTH CENTURY LITERATURE; history, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Descartes, Pascal, La Rochefoucauld, La Bruyère, Boileau, Saint-Simon, Mme. de Sévigné, Bossuet, Corneille, Racine, Molière, Fénelon, Malherbe, La Fontaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. *Mon., Wed., Fri.*, 2.30. Professor HENNING.

25. NINETEENTH CENTURY LITERATURE; history, philosophy, criticism, memoirs, travels, fiction, drama, lyric poetry. Thierry, Michelet, Mignet, Thiers, Taine, Sainte-Beuve, Brunetière, France, Lemaitre, Renan, Gautier, Mme. de Stael, Chateaubriand, Hugo, George Sand, Merimée, Balzac, Flaubert, Daudet, Maupassant, Loti, Musset, Dumas fils, Augier,

Maeterlinck, Rostand, Lamartine, Vigny, the Romantic poets, the Parnassians, the Symbolists, etc. Translations, collateral reading, and reports thereon, lectures on literature and history. Not given in 1912-13.

Third Section. Primarily for Graduates.

57. THE COMEDIES OF MOLIÈRE. Professor HENNING.

60. THE ROMANTIC MOVEMENT IN FRANCE, with some reference to the same movement in England and Germany. Professor HENNING.

Other courses may be arranged for competent graduates.

SPANISH.

First Section. Primarily for Undergraduates.

1. GRAMMAR, COMPOSITION. Hills and Ford's Spanish Grammar. Translations and reading of nineteenth century fiction and drama. Open to first-year students only by permission of the instructor. *Mon., Wed., Fri.,* 5.00. Mr. HANCOCK.

2. TRANSLATION OF MODERN PROSE AND POETRY, with much collateral reading. *Mon. Wed., Fri.,* 10.15. Professor HENNING.

PROFESSIONAL DEPARTMENTS.

DEPARTMENT OF LAW.

FACULTY.

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY
CHARLES NOBLE GREGORY, A.M., LL.D.....Dean and Professor of Law
MELVILLE CHURCH, LL.M.....Professor of the Law of Patents
WALTER COLLINS CLEPHANE, LL.M.....Professor of Law
EDWIN CHARLES BRANDENBURG, LL.M.....Professor of Law
ARTHUR PETER, LL.M.....Professor of Law
JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
WENDELL PHILLIPS STAFFORD, LL.D.....Professor of Law
JOHN WILMER LATIMER, LL.B.....Assistant Professor of Law
EVERETT FRASER, A.B., LL.B.....Assistant Professor of Law
HENRY CRAIG JONES, A.B., LL.B.....Assistant Professor of Law
MERTON LEROY FERSON, A.M., LL.B.....Assistant Professor of Law
ALFRED BUHRMAN Clerk of the Moot Court
WILLIAM CABELL VAN VLECK, B.A., LL.B..Secretary of the Department of Law and Instructor in Law

COURT OF APPEALS.

WILLIAM F. MATTINGLY, LL.D.....Chief Justice
JOHN BELL LARNER, LL.D.....Associate Justice
STANTON JUDKINS PEELLE, LL.D.....Associate Justice

GENERAL STATEMENT.

This Department, established in 1865, is the oldest school of law in the city of Washington. Its course of instruction for the degree of Bachelor of Laws, originally requiring but two years, was gradually expanded, until in 1898, in accordance with the recommendation of the American Bar Association, it was increased to three years. The Faculty has also shown a gradual increase in numbers commensurate with the expansion of the course and the growing number of students in attendance. Beginning with 1903, the Board of Trustees adopted the policy of

placing most of the important topics of substantive law under the charge of trained professional teachers giving their whole time to the work of legal instruction. Those branches of the law connected with practice are under the charge of professors who are actively engaged in the administration of the law either at the bar or on the bench.

In 1877 a year of graduate work, leading to the degree of Master of Laws, was added to the course of instruction offered. A special course in Patent Law was added in 1895.

In 1900 the Law Department was one of the group of law schools which organized the Association of American Law Schools, and it has remained a member of this Association since that time. This Association includes thirty-seven of the best and most progressive law schools of the country and is committed to the policy of advancement in legal education.

THE ADVANTAGES OF WASHINGTON FOR THE STUDY OF LAW.

To students of law, the peculiar advantages of Washington are manifest. The Supreme Court of the United States is in session during practically the entire school year. Students have the rare opportunity of hearing the arguments presented by leading American lawyers and the decisions of this high tribunal, which are delivered orally each Monday, upon the important legal questions which come before that court for final determination. Congress is in session during the winter, and here students see the practical workings of the largest and most important law-making body. The Department of Justice, the legal branch of the Federal Government, is also located in Washington. Besides the above there are also the United States Court of Claims, the United States Court of Customs Appeals, the United States Commerce Court, and the various local courts of the District of Columbia. The last-named courts exercise the unusual dual function of State and Federal courts. By means of attendance upon these courts students may familiarize themselves with all branches of legal procedure.

HOURS FOR LECTURES.

The hours of instruction are 7:50-8:40 a. m., 9 a. m.-12 m. and 4:50-6:30 p. m. Many of the courses are duplicated, so that a student may, if he so desires, confine his work largely either to the forenoon or to the afternoon. Students who desire, or are compelled by circumstances, to support themselves by employment in the Government Service or elsewhere, or who desire to obtain practical experience in an attorney's office in addition to their work in law school, will find this arrangement of hours especially desirable. Such students may

complete the full course for the degree, confining their attendance entirely from 4:50-6:30 p. m., or attending partly from 7:50-8:40 a. m. and partly from 4:50-6:30 p. m.

LOCATION.

The Department of Law occupies the entire fifth and sixth floors of the New Masonic Temple, corner of New York Avenue, Thirteenth and H Streets N. W., and is easily accessible from all parts of the city. The quarters are well equipped with commodious lecture rooms, moot court rooms, offices, the law library, and a students' room.

ACADEMIC YEAR.

The academic year extends through more than eight months, beginning on the last Wednesday in September and ending on the Wednesday following the Wednesday nearest the first day of June, and is divided into two half-years, the second half-year beginning on the first day of February. The session of 1912-13 begins on Wednesday, September 25 and closes Wednesday, June 11. Since a number of the courses given during the first half-year are completed before the beginning of the second half-year, it is possible for a student to enter on the 1st of February of any year and be graduated three years from that date, receiving his degree at the Winter Convocation, held on February 22, of each year.

Students who apply for registration not later than two months from the close of registration or students absent for unavoidable cause for not exceeding two months may remove the condition in attendance by study for a period of one and one-half times the period of the absence, under a practitioner during such time as the Department of Law is not in session, proof thereof to be made by affidavit of the practitioner.

ADMISSION.

1. For the Degree of Bachelor of Laws.

In conformity with the requirements of the Association of American Law Schools, of which this school is a member, applicants for admission as candidates for the degree of Bachelor of Laws must be at least eighteen years of age and must have had educational training sufficient to satisfy the entrance requirements of the Department of Arts and Sciences of the University. In order to satisfy these requirements, which are set out at length in the General Catalogue of the University, students must present credits aggregating 15 units, which are broadly equivalent to a four years' high school course. A unit represents approximately one year's study in a subject in a preparatory

or high school. The fifteen units must include English 3 units, Mathematics 2 units, and 2 units of one of the following languages: Latin, Greek, French, German or Spanish. The remaining eight units are elective. Units may be satisfied in general as follows:

English, 3 units.
Requirements recommended by the Conference on Uniform Entrance Requirements in English, Feb. 22, 1909, in Grammar, Composition and Literature.

Latin
- Elementary, 2 units
 - Grammar and Composition
 - Caesar
- Advanced, 2 units
 - Cicero
 - Virgil
 - Prose Composition

Greek
- Elementary, 2 units
 - Grammar and Composition
 - Xenophon
- Advanced, 1 unit
 - Homer

French
- Elementary, 2 units
- Advanced, 2 units

Spanish
- Elementary, 2 units

German
- Elementary, 2 units
- Advanced, 2 units

History
- Ancient, 1 unit
 - Greek and Roman
- Mediaeval and Modern European, 1 unit
- English, 1 unit
- American and Civil Government, 1 unit

Mathematics
- a. Algebra
 - Elementary, 1 unit
 - Advanced, ½ unit
- b. Plane Geometry, 1 unit
- c. Solid Geometry, ½ unit
- d. Plane Trigonometry, ½ unit

Physics, 1 unit
- Recitations and Laboratory work

Chemistry, 1 unit
- Recitations and Laboratory work

Other subjects which will be accepted on the basis of one unit for a year's work are botany, zoology, physiology, physiography, political economy and other accredited high school subjects.

Manual Training High School subjects:
- Shopwork, not exceeding 2 units
- Domestic Science, not exceeding 2 units
- Domestic Arts, not exceeding 2 units

Business High School subjects:
- Accounting and Finance, 1 unit
- Bookkeeping, 2 units
- Business Organization, 1 unit
- Commercial Law, 1 unit
- Government and Industrial Problems, ½ unit
- Commercial History, ½ unit
- Commercial and Physical Geography, ½ unit

Applicants for admission on certificate should secure formal certificates setting forth the credits claimed, and present these certificates attached to their application forms. All applications for admission should be addressed to the Secretary of the Department of Law, who will, upon request, furnish proper blanks and detailed information as to entrance examinations.

2. For the Degree of Master of Laws or Master of Patent Law.

Candidates for these degrees must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools, of which this school is a member.

3. For the Course in Patent Law.

Only those students who are graduates of an approved law school or members of the bar in good standing will be admitted as students in the course in Patent Law.

4. Special Students.

Persons who for any reason do not qualify as candidates for a degree may, with the assent of the professors whose courses they elect to take, be admitted as special students.

5. Auditors.

Persons are allowed to register and to attend classes as auditors for the regular fees without being required to take active part in the exercises or to pass examinations, but no credit will be allowed for such attendance only.

ADVANCED STANDING.

Students may be admitted to advanced standing in the second or third year classes upon satisfying the requirements for the work of the preceding year or years. These requirements may be met by presenting a certificate from any law school of accredited standing showing that the student has successfully completed equivalent courses, or by passing the regular examinations set for that purpose at the beginning of the term, after the student has shown that he has pursued a course of study in a law school in the subjects upon which he is examined, covering at least as many hours as are required for such subjects in this University. No credit is given for study pursued in a law office, except as explained above under the statement as to the Academic Year.

All examinations that may be required of applicants for advanced standing are held during the first week of each session.

CREDIT GIVEN BY OTHER SCHOOLS FOR WORK DONE.

Because of the fact that the Law Department is a member of the Association of American Law Schools the work done by a student is given a maximum of credit by the other law schools of the country both as to time and, as far as the authorities of this school have been able to ascertain, as to subjects. This enables students who, for any reason, are unable to complete their work in Washington to continue it at other institutions with a minimum of loss of time and work.

METHOD OF INSTRUCTION.

Instruction in subjects of substantive law is based mainly upon the study and discussions of cases.

In the discussions in the class room every effort is made to lead the student to a clear understanding of fundamental legal principles and to afford him scientific training in the best method of study and legal reasoning.

These courses are mainly given by members of the law faculty who give their entire time to the Law School and are in daily attendance.

Subjects involving the adjective law are taught by lectures, study of text books and cases, and by practical work in pleading, drafting and the trial of moot cases. These courses are in charge of experienced members of the bar in active practice.

UNDERGRADUATE PROFESSIONAL COURSES.

Undergraduate students in Arts and Sciences upon the completion of forty-five units of credit may take the first year's work of the course for Bachelor of Laws, crediting them fifteen units, on the completion of which they may receive the academic degree.

COURSES OF INSTRUCTION.

A. Leading to the Degree of Bachelor of Laws.

The course of instruction leading to the degree of Bachelor of Laws extends through a period of at least three years. An average of twelve hours class work per week for three years is required of all candidates for this degree.

Students devoting their whole time to the study of law may, with the permission of the Dean, select additional subjects from the second and third years, provided the aggregate of the hours taken does not exceed fifteen a week. Such excess credits may be applied toward the degree of Master of Laws or of Master of Patent Law.

Students not devoting their whole time to the study of law are urged to devote more than three years to the completion of the course. Many students find it more satisfactory to do so. In case of unsatisfactory work students are required so to extend the period of study.

FIRST YEAR SUBJECTS.

First Semester.

* Contracts (A). Professor GREGORY. Three hours a week. Williston's Cases on Contracts.

Criminal Law. Professor EARNEST. Two hours a week. Clark's Criminal Law and Mikell's Cases on Criminal Law.

Domestic Relations. Mr. VAN VLECK. Two hours a week. Kales' Cases on Persons.

* Property I (A). Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volume I.

* Torts (A). Assistant Professor JONES. Two hours a week. Ames & Smith's Cases on Torts. (Vol. I, 1910 Ed., Vol. II, 1909 Ed.)

Second Semester.

Agency. Assistant Professor FERSON. Three hours a week. Wambaugh's Cases on Agency.

* Contracts (B). Professor GREGORY. Three hours a week. Williston's Cases on Contracts.

Criminal Procedure. Professor EARNEST. One hour a week. Clark's Criminal Procedure and selected cases.

* Property I (B). Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volumes I and II.

* Torts (B). Assistant Professor JONES. Two hours a week. Ames & Smith's Cases on Torts. (Vol. I, 1910 Ed., Vol. II, 1909 Ed.)

SECOND YEAR SUBJECTS.

First Semester.

* Common Law Pleading and Practice. Professor CLEPHANE. Two hours a week. Tyler's Stephen on Pleading.

* Equity I. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

* Evidence (A). Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Municipal Corporations. Assistant Professor JONES. Two hours a week. Beale's Cases on Municipal Corporations. Given in 1912-13 and in alternate years thereafter.

* Property II (A). Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volumes II and III.

* Required Subjects.

Sales. Assistant Professor FERSON. Three hours a week. Williston's Cases on Sales. (Second Edition.) (Given in 1912-13 and in alternate years thereafter.)

Second Semester.

Damages. Assistant Professor JONES. Two hours a week. Beale's Cases on Damages. (Not given in 1912-13 and in alternate years thereafter.)

* Equity II. Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

* Equity Pleading and Practice. Professor CLEPHANE. One hour a week. Shipman on Equity Pleading.

* Evidence (B). Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

Insurance. Assistant Professor FERSON. Three hours a week. Wambaugh's Cases on Insurance. (Not given in 1912-13 and in alternate years thereafter.)

Partnership. Mr. VAN VLECK. Two hours a week. Case book to be announced. (Given in 1912-13 and in alternate years thereafter.)

* Property II (B). Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Volume V.

Public Service Companies. Assistant Professor JONES. Two hours a week. Wyman's Cases on Public Service Companies. Second edition. (Given in 1912-13 and in alternate years thereafter.)

Quasi-contracts. Mr. VAN VLECK. Two hours a week. Scott's Cases on Quasi-contracts. (Not given in 1912-13 and in alternate years thereafter.)

THIRD YEAR SUBJECTS.

First Semester.

Bankruptcy. Professor BRANDENBURG. One hour a week.

* Bills and Notes. Assistant Professor FERSON. Three hours a week. Huffcutt's Negotiable Instruments: Statutes, Cases and Authorities. (Second Edition.)

Brief Making. Assistant Professor LATIMER.

Conflict of Laws (A). Professor GREGORY. Two hours a week. Lorenzen's Cases on Conflict of Laws.

Legal Tactics and Ethics. Professor CLEPHANE. One hour a week.

* Moot Court. Professors CLEPHANE, EARNEST and LATIMER. Two hours a week.

Organization and Management of Corporations. Professor CLEPHANE. One hour a week. Clephane on the Organization and Management of Corporations.

* Required Subjects.

Patent Law (A). Professor CHURCH. Two hours a week.

* Private Corporations (A). Assistant Professor JONES. Two hours a week. Warren's Cases on Corporations.

Suretyship. Assistant Professor JONES. Two hours a week. Ames' Cases on Suretyship.

Second Semester.

Conflict of Laws (B). Professor GREGORY. Two hours a week. Lorenzen's Cases on Conflict of Laws.

Constitutional Law. Assistant Professor FRASER. Two hours a week. Case Book to be announced.

Federal Procedure. Professor BRANDENBURG. One hour a week.

* Moot Court. Professors CLEPHANE, EARNEST and LATIMER. Two hours a week.

Patent Law (B). Professor CHURCH. Two hours a week.

Preparation of Legal Instruments. Assistant Professor LATIMER One hour a week.

* Private Corporations (B). Assistant Professor JONES. Two hours a week. Warren's Cases on Corporations.

Trusts. Assistant Professor FERSON. Three hours a week. Ames' Cases on Trusts.

Wills and Administration. Professor Peter. One hour a week.

Second and third year subjects, not required and given in alternate years, are open to both second and third year students.

Third Year students may elect also in the College of the Political Sciences:

Administrative Law. Mr. MCNEMAR. Three hours a week, second semester. Freund's Cases on Administrative Law.

B. Leading to the Degree of Master of Laws.

Students admitted as candidates for the degree of Master of Laws are required to elect subjects, not previously taken, covering a minimum of ten hours a week. These may be freely elected from the subjects offered by the Faculty of Law and from the following subjects given in the College of the Political Sciences:

International Law.

Comparative Constitutional Law.

Administrative Law.

Taxation.

Any excess credits obtained in this Law School in the course leading to the degree of Bachelor of Laws may be applied toward the Master's degree. The degree of Master of Laws will not be conferred, however, until one year after the receipt of the Bachelor's degree.

* Required Subjects.

Advanced Practice.—Candidates for the Master's degree may also elect advanced practice work in the Moot Court, receiving therefor a credit of two hours for the year.

C. Leading to the Degree of Master of Patent Law.

A candidate who has successfully completed the requirements prescribed for the degree of Master of Laws, if he has duly completed and received credit for the courses in Patent Law and Federal Procedure, may elect to become a candidate for the degree of Master of Patent Law instead, and that degree may be conferred upon him, but the above mentioned topics shall be counted only toward one degree, and shall not be available for the degree in Patent Law, if they have been counted toward any other degree.

COURSE IN PATENT LAW.

A special course in Patent Law and Patent Law Practice is given by Professor Church. The purpose of this course is to prepare those taking it for practice in all matters involving the law of patents. The course extends throughout one year, with two lectures or sessions of the Moot Court each week. (For the admission requirements for this course, see Admission Requirements, *ante.*)

This course may be elected and counted by students toward the degree of Bachelor of Laws, and such students will be required to take only the first semester of the regular moot court work. A certificate, under the seal of the University, is granted to all students who complete this course.

COURSES IN PRACTICE.

A. Moot Court Work.

1. *For the degree of Bachelor of Laws:*

Particular stress is laid upon moot court work. Aside from the practice court connected with the course in Patent Law, there are four courts in which undergraduate students pursue their work. Three of these are *nisi prius* courts and are presided over by members of the Washington Bar in active practice. The fourth is a Court of Appeals to review the cases tried in the courts of first instance. This court is composed of the Chief Justice of the United States Court of Claims and of members of the Washington Bar.

Every third-year student, before receiving the Bachelor's degree, is required to prepare the pleadings in and prosecute to judgment the required number of cases in the *nisi prius* courts, with the privilege of appeal to the appellate tribunal. At least two hours in each week during the year must be spent by each third year student in active partici-

pation in moot court work in the court room to which he is assigned. Students electing Patent Law will be required, in view of the special moot court work in that course, to take only the first half-year of the regular moot court work.

Statements of facts are furnished, such as would be related to a lawyer in active practice by his client. Each student must determine whether or not upon such facts the particular case in hand is one of common law or equitable cognizance. He must then frame his pleadings, serve his writs, and answer his adversary's pleadings until issue is joined in legal manner, after which the case is brought on for hearing in strict accordance with the rules of actual practice. Juries are empaneled in accordance with settled legal procedure, witnesses are examined and cross-examined, and the case conducted through all the various stages of the trial or hearing down to and including the judgment or decree, after which, should the case be appealed, it must be carried through the appellate court, involving the preparation of the record on appeal, briefs of counsel, etc.

2. *For the degree of Master of Laws:*

The same facilities for moot court work as are described above are afforded in the course leading to the degree of Master of Laws. In this course, however, the nature of the cases assigned is somewhat different, involving, in addition to the ordinary cases at common law or in equity, cases of a special character, such as habeas corpus, certiorari, quo warranto, injunction, mandamus, extradition, replevin, attachment, etc. All candidates for this degree taking moot court work are required to carry through the appellate court each case assigned to them.

3. *Officers and Equipment:*

The clerk of the Moot Court is one of the assistant clerks of the Supreme Court of the District of Columbia, but his assistants in each court room are chosen from the student body, from whose ranks are also drawn the criers, jurors, and other officials, thus giving to the students the benefit of practice in administrative judicial machinery. The Moot Court is to all intents and purposes an actual court. The rooms in which the sessions are held are fitted up with judges' benches, clerks' desks, jury boxes, and counsel tables, and from the time the crier announces that the court is in session until he announces its adjournment the procedure is identical with that of a regular judicial tribunal.

It is believed that any student who gives the proper attention to this feature of the law curriculum will be enabled to go out from this institution and creditably try cases in court, although he may never have been in an actual court room.

A careful record is kept of the work of each student, both as to his pleadings and his conduct of the case in court, and the ratings thus

given determine, in connection with his ratings upon other subjects, whether or not he is entitled to a degree.

B. Brief Making.

In view of the rapidly increasing bulk of our case law, it becomes absolutely indispensable that students should be taught to find authorities in point, to collate them, and to present them to the court in a clear and concise form. In order to afford this training a course in Brief Making is given. This course will be conducted in part in the Library of the Department of Law, so that the use of the digests and reports may be illustrated.

C. Preparation of Legal Instruments.

Students are instructed in this course in the actual preparation of deeds, mortgages, wills, assignments, contracts, partnership agreements, and other legal instruments which a lawyer is called upon to prepare. Statements of facts are furnished to the class by the professor in charge, and each student is required to prepare the various forms of instruments. These are corrected by the professor and are discussed and criticised in class. Careful consideration is given to special forms of execution and acknowledgment when one of the parties to the instrument is a corporation, a partnership, a married woman, and the like.

D. Legal Tactics and Ethics.

Every young lawyer entering upon his professional career is desirous of availing himself of the experience of an older practitioner and of learning many things which are not taught and cannot be taught from books. It is to meet the needs of this class of men that this course is given. It is in charge of a member of the Washington Bar whose practice has been an active one, extending over a period of many years.

A short introductory talk is given uopn the relations between attorney and client, including the important subject of fees, after which the student is given the benefit of practical hints upon the manner of starting in practice and opening and furnishing an office, with suggestions as to office systems.

The student is told how to listen intelligently to his client's grievances; how to draw up the pleadings arising out of these grievances; how to prepare for trial the case thus made, including the work of preparing the evidence; how to try the case and examine and cross-examine witnesses; the manner of making up the record, and conducting the argument on appeal, including the use of authorities in court. The Canons of Professional Ethics adopted by the American Bar Association are studied in this course. Practical instruction in Extraordinary Legal Remedies constitutes a part of this course.

EXAMINATION AND GRADES.

Regular Examinations:

Written examinations are held at the close of each semester. These examinations are final as to the work of that semester. All students, unless specially excused by the Dean, are required to take the regular examinations in the subjects pursued.

No student, except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the lectures and have done all the work required in the course of instruction upon that subject.

Grades:

At all examinations the grading of students will be indicated by the letters A, B, C, D, E, and F, representing, respectively, *excellent, good, satisfactory, fair, conditioned, and failed.*

Conditions and Failures:

A student receiving the grade of F (failed) in any subject will be required to repeat the subject.

A student receiving the grade of E (conditioned) in any subject, will be required to repeat that subject unless he pass the *next* regular examination for removal of conditions with a grade of at least C.

Regular examinations for the removal of conditions are held during the first week of each academic year. Special examinations for the removal of conditions are held at the end of each academic year for the benefit of candidates for the Bachelor's degree, who have been conditioned in not more than six semester hours during their last year. Applications for permission to take any of these examinations must be made in writing to the Secretary of the Department of Law not later than three days before the date for which the examination is scheduled.

Students who have failed in more than twelve semester hours in the preceding year will not be allowed to register without special permission from the Dean.

Special Examinations:

No special examinations, other than those above provided for, will be granted to any students except those of the graduating class who, for good cause, shall have been excused by the Dean from taking any regular examination during the third year.

Attendance:

Regular attendance is required in all courses; and the examination grade of any student in any course may be withheld and the passing of

another examination or the repetition of the course may be required on the sole ground of unsatisfactory attendance.

Election of Courses:

No student shall be allowed to register in courses aggregating more than fifteen hours during any one semester without first obtaining the permission of the Faculty.

Every student who is a candidate for graduation with the degree of Bachelor of Laws in his third year shall take and pass in each semester of his third year courses aggregating ten hours.

Election of courses to be taken must be made in all cases within ten days after the beginning of the semester in which such courses are given.

DEGREES.

1. Bachelor of Laws.

The degree of Bachelor of Laws will be conferred upon students who have studied law for a period of at least three years and passed satisfactory examinations upon subjects aggregating thirty-six year hours, and whose attendance and conduct have been satisfactory to the Faculty. The degree will not be conferred upon students deficient in Bills and Notes, Common Law Pleading and Practice, Contracts, Corporations, Equity I and II, Equity Pleading and Practice, Evidence, Moot Court, Property I, II and III, and Torts.

The degree of Bachelor of Laws *with distinction* will be awarded to students whose average percentage in all subjects is equivalent to the grade of A.

2. Master of Laws or Master of Patent Law.

The degree of Master of Laws or Master of Patent Law will be conferred upon students who have completed the work prescribed for these degrees with the grade of C or better, and whose attendance and conduct have been satisfactory to the Faculty.

LAW LIBRARY AND READING-ROOM.

A well-equipped working library, comprising about 5,500 volumes, is open to the students from 8.30 a. m. to 10.00 p. m. Competent librarians are in charge and will give students assistance in looking up subjects and in the use of books.

The library contains the complete decisions of the highest courts of thirty-two states and the District of Columbia, the complete reports of the United States Supreme Court and the other Federal courts, the complete National Reporter System, the Century, Decennial and American Digests, the various encyclopaedias of law, the Lawyers Reports Annotated, the American Decisions, American Reports and American

State Reports, the English Common Law and Chancery Reports, the English Reprints, the Law Journal Reports since 1865, and about eight hundred standard text-books and legal periodicals.

In addition to these facilities, the students have free access to the Congressional Library, and other public libraries.

PRIZES.

The Ordronaux Prize Scholarship.—A prize scholarship, known as "The Ordronaux Prize Scholarship," is awarded to that member of the Second Year Class taking the regular course, who shall during his first and second years attain the highest average grade. In determining the average grade of contestants the grade received in each subject shall be multiplied by the number of hours given to such subject and the sum of the results divided by the total number of hours. The recipient of this prize scholarship shall be entitled to receive credit for tuition fees to the extent of ten hours' work in his third year. Library and diploma fees will remain payable. The award of this scholarship is purely personal and will not be commuted to a cash payment, nor will it be transferable. The recipient of the scholarship must make use of the scholarship during the session next succeeding its award; otherwise, the same shall be awarded, upon like conditions, to the person having the next highest grade.

This scholarship, for the session 1911-12, was awarded to Horace Greeley Macfarland.

Ellsworth Prize.—A prize of $25 in gold, offered by Mr. Fritz von Briesen, called the "Ellsworth Prize," is awarded for the best work done by a regular student in the Patent Law Course.

Awarded in 1911 to Ira James Adams.

Phi Delta Phi Prize.—The Marshall Chapter of Phi Delta Phi Fraternity, which is the local chapter, has offered a prize of $25 cash, to be awarded to that member of the first year class taking the regular course, who shall attain the highest average grade, the grade to be determined in the same manner as the Ordronaux Prize.

PUBLIC SPEAKING AND DEBATING.

Excellent facilities for training in the art of public speaking are afforded by the two debating societies which have been organized in the Department of Law. These societies, known as the Columbian and Needham Debating Societies, meet weekly for debate. Membership in

these societies is entirely optional, but their work is encouraged in every legitimate way by the Faculty, and students are urgently advised to take part in their exercises.

Intercollegiate debates are also held. Membership on the teams which represent the University in these contests must be won in preliminary contests held for such purpose. These debates are conducted under the supervision of a committee of the University Faculty.

ADMISSION TO THE BAR.

By the rules of the Supreme Court of the District of Columbia, applicants for admission to the Bar are required to have studied law for three years under the direction of a competent attorney, but by those rules the course in the Department of Law of the University is regarded as discharging this requirement. Its work is also accepted as fulfilling the requirements for preliminary law study in almost all of the other jurisdictions of the United States.

FEES.

1. Matriculation fee (payable once)	$5
2. Annual library fee	3
3. Tuition fee per annum for each hour taken per week	10
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms	2
5. Fee for graduation	10
6. Fee for a certificate under the seal of the University	2

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

The library fee will not be charged for the first half-year during which a course is completed in the case of students who enter at the beginning of the second half-year and pay the library fee for that year.

PAYMENT OF FEES.

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in eight monthly installments in advance. Students unable to pay their

fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. Fees are payable at the office of the Treasurer of the University, 2024 G Street, or of the Secretary of the Department of Law.

BOARD AND ROOMS.

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY OF THE DEPARTMENT OF LAW,
The George Washington University,
New Masonic Temple, Washington, D. C.

DEPARTMENT OF MEDICINE

FACULTY.

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Professor of Obstetrics and Dean, Emeritus
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WILLIAM KENNEDY BUTLER, A.M., M.D.....Professor of Opthalmology
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EDMUND THOMAS MURDAUGH FRANKLIN, M.D....Instructor in Surgery
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CARL LAWRENCE DAVIS, M.D.....Insrtuctor in Anatomy

THE STAFF OF THE GEORGE WASHINGTON UNIVERSITY HOSPITAL AND DISPENSARY.

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W. C. Moore, M.D.,
C. B. Conklin, M.D.,
W. J. Mallory, M.D., }*Attending Physicians*

General Surgery.

A. L. Hunt, M.D.,
E. T. M. Franklin, M.D.,
J. P. Fillebrown, M.D., }*Attending Surgeons*

Genito-Urinary Diseases.

Francis R. Hagner, M.D.....*Genito-Urinary Surgeon*
Henry R. Elliott, M.D.,
Truman Abbe, M.D.,
Homer G. Fuller, M.D., }*Associates*

Gynecology.

J. L. Riggles, M.D.,
V. B. Jackson, M.D.,
Adam Kemble, M.D., }*Attending Gynecologists*

Obstetrics.

H. W. Lawson, M.D.....*Associate Obstetrician-in-Chief*
E. W. Titus, M.D.....*Assistant Obstetrician*

Eye, Ear, Throat, and Nose.

E. G. Seibert, M.D.....*Laryngologist and Ophthalmologist*

Neurology.

B. R. Logie, M. D.....*Neurologist*

Electro-Therapeutics.

W. H. Merrill, M.D.....*Electro-Therapeutist*

Dermatology.

C. A. Simpson, M.D.....*Attending Dermatologist*

Pediatrics.

Milton Hahn, M.D.....*Attending Pediatrician*

Pathology.

F. F. Russell, M. D.....*Pathologist*
J. B. Briggs, M.D.....*Associate Pathologist*
R. M. Le Comte, M.D.....*Assistant Pathologist*

Laboratory.

F. A. Hornaday.....*Director*

HISTORICAL.

The *Department of Medicine of the George Washington University,* in the chronological order of establishment, is the seventeenth Medical School in the United States. The first course of lectures began in March, 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

When first established, and for many years thereafter, this school, like most others in this country, gave only a two years' course of five months each. In 1878 the course was lengthened by the establishment of a Spring Session devoted to lectures in certain special subjects. In 1879 the course was lengthened to seven months and attendance upon three annual sessions required, and in 1893 attendance on four annual courses was made obligatory upon all candidates for the degree of Doctor of Medicine. In order to increase the facilities for actual bedside teaching, the University Hospital and the University Dispensary were established in 1898 and made a part of the Department of Medicine. In 1902 the old Medical College building, in which the exercises had been held since 1867, gave place to the present large and commodious structure.

EDUCATIONAL POSITION.

The Medical Department of the University has been for several years a member of the Association of American Medical Colleges. It is one of Medical Colleges designated as "acceptable, class A," by the American Medical Association, and it is accredited for all its work by the Combined (Royal) Medical Examining Boards in England.

These facts guarantee the character of the work done by the College and insures its students and graduates all the advantages which accrue from such association and recognition.

BUILDINGS AND OTHER FACILITIES.

Buildings of the Medical Department. All the buildings adjoin each other and consist of the Medical College Building and the University Hospital and the University Dispensary. They are most advantageously situated in the heart of the city near both systems of car lines. As the Hospital and Dispensary adjoin the College, their clinical facilities are easily accessable to the students, and the pathological material and the material for clinical microscopy and clinical chemistry afforded by the Hospital and Dispensary are directly used in the College laboratories.

The *Medical College Building* is a modern commodious, five-story structure, with spacious, well-lighted, well-ventilated lecture and class rooms, laboratories, and students' rooms. It has an elevator service, and is equipped throughout with steam heat, gas, electricity, and all modern improvements.

The *Laboratories,* six in number (for anatomy, chemistry, physiological and clinical chemistry, histology and embryology, physiology and pharmacology, and bacteriology and pathology), are fully equipped with the most approved appliances, so that students may adequately pursue the laboratory courses and acquire the technical skill necessary in modern clinical and research methods.

The *University Medical Library* is open for study and consultation from 9 a. m. to 9 p. m. It contains at present more than 3,000 volumes, and provision is made to add to it as published the important new works on medicine. The most important medical periodicals are regularly received. The Library is an excellent working collection, as it affords opportunity to adequately read up on the subjects presented in the courses.

The *Pathological Museum* contains a great many valuable and interesting specimens. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

ADVANTAGES OF LOCATION.

Advantages of Washington *as a place for pursuing the study of medicine.* This city now has over four hundred thousand inhabitants, providing abundant clinical material to the hospitals, which have an aggregate of over three thousand beds. In these hospitals clinical instruction, in addition to that in the University Hospital, is given by members of the Faculty.

The *great libraries* and *museums* connected with the various Government institutions afford unparalleled facilities for study.

The Library of the Surgeon General's Office of the United States Army is the most complete medical library in the world. All the facilities of this great library are open to medical students. There is also the Library of Congress, the Public Library, and the many excellent libraries of the various Government offices, all of which are open to students.

The *Army Medical Museum* affords an unrivaled opportunity for studying the conditions met with in military and general surgery. It contains on exhibition a collection of anatomical and pathological specimens unequalled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy and the National Museum which contains the most complete and best arranged collection of materia medica in the world.

The drugs are shown in all their processes of manufacture. The Botanic Gardens, the Smithsonian Institution, the Fish Commission, the Department of Agriculture, all afford opportunities for study both in medicine and its collateral sciences.

On account of the many advantages offered in this city, the *Army and Navy Medical Schools* have been here located. The Alumni of this College are largely represented in all public services, and have been highly successful in passing the rigid examinations by them. Ten per cent of the total number of the regular medical corps of the United States Army are graduates of this College.

Aside from the special advantages offered for the study of medicine, the cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is the seat of the General Government, are broad and national, make it an ideal place for a medical student to pass his four years of study.

ADMISSION.

The requirements for admission are those of the Association of American Medical Colleges, and are as follows:

Candidates for matriculation must present creditable certificates of good moral character from two physicians in good standing.

The education requirements for admission are:

(*a*) A diploma from an accredited high school, normal school, or academy requiring for admission evidence of the completion of an eight-year course in primary and intermediate grades; and for graduation not less than four years of study.

(*b*) A Bachelor's degree from an approved college or university.

(*c*) Candidates not having a Bachelor's degree or a diploma from an accredited high school or academy may be admitted upon passing an examination in the following branches:

1. Required (18 points); Mathematics (4 points); English (4 points); History (2 points); Language (4 points—Latin, French, German); Science (taken from physics, chemistry, botany, zoology), 4 points.

2. Optional (to 12 points taken from); English (4 points); History (6 points); Language (6 points); Manual Training (2 points); Mechanical Drawing (1 point); Natural Science (botany, biology, and zoology, 2 points each); Astronomy, Civics, Geology, Physical Geography, Physiology and Hygiene, Political Economy (2 points each).

(One point in any subject in a high school or academic course demands not less than five periods per week of forty-five minutes each for eighteen weeks.)

The examination is conducted by the University and will be held in the latter part of May and September. Candidates desiring ex-

amination must submit their certificates of character to the Dean before the first of the month in which they desire to be examined.

Certificates from reputable instructors recognized by the State Board of Medical Examiners duly authorized by law or by the Superintendent of public instruction in States having no examining board may be accepted in lieu of any part of the examinaiton.

As the laws relating to the preliminary educational qualifications required of physicians differ in many of the States of the Union, candidates are advised to make themselves familiar with the provisions of the medical statutes of the States in which they contemplate applying for license to practice. Attention to this precaution may save future embarrassment.

ADMISSION OF STUDENTS FROM OTHER SCHOOLS.

Students who have attended one or more terms at any other medical college in good standing, and who have the necessary preliminary educational requirements, may be admitted to advanced standing upon passing the examination required of students for the stage at which they propose to enter, or upon presenting certificates of examination covering courses equal to those in this College.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted as special students without examination to pursue any course they may elect.

ACADEMIC YEAR.

The *Academic Year* begins on the last Wednesday in September and ends on the first Wednesday in June. It is divided into two semesters of four months each.

The term of study for the degree of Doctor of Medicine consists of four years of eight months each. The next session, the ninety-second, begins September 25, 1912, and ends June 8, 1913.

Students must register promptly at the beginning of the session, in order that their time of study shall count as a full year.

Degrees are conferred at Commencement, the second Wednesday in June.

Optional Five-Year Course.

Since the session of 1904-05 a five-year optional course has been offered for the benefit of students. Students in this course take their subjects with the regular four-year classes, but as they take fewer subjects each year, they are able to devote more time to each study.

SYSTEM OF INSTRUCTION.

Instruction is carried on by laboratory work, recitations, lectures, bedside instruction, and hospital and dispensary clinics. Particular stress is laid upon laboratory work and clinical teaching. The clinical material of the University Hospital and Dispensary is utilized to the fullest extent, as the Hospital, the Dispensary, and the Medical College are under the same control. Additional clinics are given in other hospitals in the city to which members of the faculty are attached.

While the greatest stress is laid upon laboratory work and clinical teaching, it is recognized that the facts so obtained must be correlated and shown in their due relation to each other and to the science of medicine. To this end didactic lectures are maintained in certain branches, as they have been found necessary to give a systematic and comprehensive idea of the larger subjects in medicine. These lectures are followed by systematic and thorough quizzes, so that it may be certain that the students properly and thoroughly grasp the ideas presented by the lectures.

The recitation and quiz work is made so complete that students do not need to employ private quizmasters.

The object sought throughout the courses is to thoroughly ground the students in the knowledge which is necessary to the practitioner of medicine. No particular attempt is made to graduate specialists in any subject. It is believed that the four years allowed are no more than sufficient time for the adequate preparation of the general practitioner.

The policy adopted by the College is to give a comprehensive, well-graded, and well-proportioned course—one that will adequately prepare the graduate to practice general medicine and meet the requirements of State Boards.

ORDER OF INSTRUCTION.

The subjects studied in each year are shown in the following table. Major subjects are in italics:

First Year.	Second Year.	Third Year.	Fourth Year.
Anatomy.	*Organic* and *Physiological Chemistry.*	*Medicine.*	*Medicine.*
Histology.	*Pathology.*	*Surgery.*	Case Teaching.
Embryology.	*Bacteriology.*	Surgical Pathology.	*Surgery.*
Physiology.	Clinical Microscopy.	Fractures and Dislocations.	Orthopœdics.
General Chemistry.	Topographical Anatomy.	*Obstetrics.*	Genito-Urinary Diseases.
	Materia Medica.	*Therapeutics.*	Operative Surgery.
	Pharmacology.	Electro-Therapeutics.	Gunshot Wounds.
	Minor Surgery.	*Gynecology.*	*Obstetrics.*
	Physical Diagnosis.	Medical Jurisprudence.	*Gynecology.*
	Pathological Physiology.	Applied Anatomy.	Laryngology and Otology.
		Clinical Chemistry.	Ophthalmology.
		Hygiene.	Dermatology.
		Dietetics.	Psychiatry.
		Clinics.	Pediatrics.
			Neurology.
			Tropical Diseases.
			Clinics.

The greater part of the fourth year is devoted to clinical work in the hospitals. During this year, however, general instruction is also given in Mental Diseases, Neurology, Dermatology, Ophthalmology, Laryngology, and Otology. Not less than 1,000 hours of clinical work are required.

ANATOMY.

Matthew Kollig, A.M., M.D.....Professor of Anatomy
D. Kerfoot Shute, M.D.....Professor of Neuro-Anatomy
J. L. Riggles, M.D.....Associate in Anatomy
Albert P. Tibbets, A.B., M.D.....Instructor in Anatomy
E. W. Titus, M.D.....Instructor in Histology and Embryology
C. L. Davis, M.D.....Instructor in Anatomy

The instruction in the various anatomical sciences—gross human anatomy, neurology, embryology and histology—is carried on by the Division of Anatomy of which the Professor of Anatomy is the head.

This insures complete correlation of the various anatomical branches and adequate instruction in each.

During the first year the course in Gross Anatomy is given mainly by practical laboratory work. Each student is required to dissect satisfactorily the lateral half of a cadaver. The dissecting-room work is supplemented by demonstration, recitation, and lectures, illustrated by lantern slides, models, and diagrams.

Throughout the course every opportunity is taken to emphasize the application of anatomy to the practice of medicine in all its departments.

Osteology and Syndesmology are taught by recitations and demonstrations at the beginning of the course, preparatory to the more advanced studies in anatomy.

In the second year a course in topographical anatomy is given, in which recitations and laboratory demonstrations are used to thoroughly familiarize the student with the subject. In the third year a course is given in the general application of Anatomy to Medicine and Surgery. In this way a thorough preparation in general and applied anatomy is given.

First Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
Gross Anatomy	120	360	480
Second Year.			
Topographical Anatomy	20	60	80
Third Year.			
Applied Anatomy	16	...	16
Totals	156	420	576

In histology and embryology instruction is given in the care and use of the microscope and in the preparation of tissues for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by recitations.

First Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
Histology	32	96	128
Embryology	16	48	64
Totals	48	144	192

PHYSIOLOGY.

Shepherd Ivory Franz, Ph.D.....Professor of Physiology
Henry R. Elliott, M.D.....Associate in Physiology
John P. Fillebrown, M.D.....Instructor in Physiology

The course in Physiology consists of lectures, recitations, conferences, demonstrations, and laboratory exercises, during the second half of the first year. The lectures cover all the important facts and theories regarding bodily functions, and are illustrated by diagrams, models, and prepared specimens. Recitations are held on assigned parts of the text-book. Conferences are held on special physiological topics, and for these exercises each student is required to prepare one thesis during the semester. In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of muscle and nerve, on the nervous system, and on the special senses. The student is required to make and keep records of the experiments, and these are criticised by the instructors. The class is divided into sections, so that each student receives a large amount of personal attention. In the second year a series of exercises is held in which special emphasis is laid on the relation of normal physiological function to the disturbances of function in disease, and upon the physiological action of drugs. It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with succeeding courses in Pathology, Therapeutics, and General Medicine.

First Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
Physiology	48	192	240

Second Year.

Pathological Physiology	...	16	16
Totals	48	208	256

CHEMISTRY.

CHARLES E. MUNROE, Ph.D....Professor of Chemistry and Toxicology
FRANK A. HORNADAY, B.S., M.D.....Associate Professor of Chemistry
EDWARD G. SEIBERT, M.D.....Associate in Chemistry

General Chemistry. A series of illustrated lectures accompanied by recitations, laboratory work, and exercises on theoretical, inorganic, organic, and technical chemistry.

Organic Chemistry. A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

Physiological Chemistry. A series of lectures, laboratory work and recitations on the proximate principles of the human body.

Clinical Chemistry. A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

First Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
General Chemistry	96	96	192
Second Year.			
Organic Chemistry	64	56	120
Physiological Chemistry	24	56	80
Third Year.			
Clinical Chemistry	...	24	24
Totals	184	208	416

MATERIA MEDICA AND THERAPEUTICS.

B. M. Randolph, M.D.....Professor of Materia Medica and Therapeutics
Noble P. Barnes, M.D.....Associate Professor of Materia Medica and Therapeutics
Henry R. Elliott, M.D.....Associate in Pharmacology
Walter H. Merrill, M.D.....Instructor in Electro-Therapeutics

Second year. (1) Lectures upon Materia Medica, including a demonstration of drugs and their preparations. (2) Recitations upon the preparations, their doses, and the various antidotes for poisons. (3) Practical exercises in prescription writing. (4) Demonstrations of drugs.

Third year. (1) Systematic lectures upon the physiological action of drugs and their effects in health and disease, their therapeutic uses, and their methods of administration. (2) Lectures and section demonstrations in electro-therapeutics. (3) Prescription writing, in which the students are given hypothetical cases for which to prescribe, the prescriptions being reported before the class for criticism and discussion.

Second Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
Pharmacology	...	64	64
Materia Medica and Toxicology	160	...	160
Third Year.			
Therapeutics	64	...	64
Electro-Therapeutics	16	16	32
Totals	240	80	320

DIETETICS.

J. B. Nichols, M. D.....Associate in Medicine

A course of lectures and quizzes on the principles of feeding in health and disease.

Third Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
Dietetics	...	32	32

PATHOLOGY AND BACTERIOLOGY.

Frederick F. Russell, M.D...Professor of Pathology and Bacteriology
C. F. Craig, M.D...Associate Professor of Pathology and Bacteriology
H. J. Nichols, M.D.....Associate in Pathology and Bacteriology
W. R. Brandenburg, M.D.....Associate in Pathology and Bacteriology
J. B. Briggs, M.D.....Associate in Pathology and Bacteriology
R. M. Le Comte, M.D.....Instructor in Pathology and Bacteriology

Bacteriology.—The first part of the session is devoted to a laboratory course of instruction in the fundamental principles and methods of pure bacteriology. A thorough drilling is given in the preparation of culture media, in sterilization and disinfection, staining, and in the several methods of differentiating bacteria.

Pathology.—The course in Pathology comprises general and special pathology and clinical microscopy. Post-mortem examinations will be utilized when possible. Coincidentally with the above is included the study of the principal pathogenic bacteria: the principles of immunity and serum therapy.

The course in instruction in special pathology will include the study of those processes requiring surgical relief; the healing of wounds and other injuries; of special diseases, neoplasms, and problems of experimental pathology.

The course in Clinical Microscopy comprises the study and examination of various tissues, fluids, and material from the standpoint of diagnosis.

Second Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
Bacteriology	45	135	180
Pathology	40	200	240
Clinical Microscopy	...	72	72
Totals	85	407	492

MORBID ANATOMY.

....., M.D.....Professor of Morbid Anatomy

The instruction in this course is mainly practical, consisting of post-mortem examinations, demonstrations, and illustrative lectures pertaining to the subjects of morbid anatomy and special pathology. Especial attention is paid to the study of the gross pathology of diseases of the brain and nervous system. Instruction in the technique of post-mortem examinations for scientific purposes and in medico-legal cases is a feature of the course.

Fourth Year.

	Hours. Lect., Rec., Dem.	Lab.	Total.
Morbid Anatomy	20	...	20

MEDICINE.

STERLING RUFFIN, M.D.....Professor of Medicine
GEO. N. ACKER, A.M., M.D.....Clinical Professor of Medicine
THOS. A. CLAYTOR, M.D.....Clinical Professor of Medicine
M. E. HIGGINS, M.D., Surg. U.S.N.....Professor of Tropical Diseases
JAMES DUDLEY MORGAN, A.B., M.D....Associate Professor of Medicine and Clinical Professor of Medicine
J. B. NICHOLS, M.D.....Associate in Medicine
H. H. DONNALLY, A.M., M.D.....Associate in Medicine
W. A. FRANKLAND, M.D.....Clinical Associate in Medicine
W. W. WILKINSON, M.D.....Associate in Medicine
CHARLES W. HYDE, M.D.....Instructor in Medicine
SOTHORON KEY, M.D.....Instructor in Medicine
C. B. CONKLIN, M.D.....Instructor in Medicine
WM. J. MALLORY, M.D.....Instructor in Medicine

Instruction in Medicine is so given as to conform to the most modern requirements. The work begins in the second year with a complete course in history-taking and normal physical diagnosis, and is continued through the third and fourth years. During the latter two years the course consists of lectures, recitations, a study of case histories, clinical conferences, and practical work in the clinical laboratory and at the bedside. The work is made as practical as possible.

The third-year class is divided into small sections, which are required to attend the daily dispensary service in the University Hospital, where they are drilled especially in history-taking and in the technique of practical physical diagnosis.

The fourth-year class is similarly divided into small sections, and these are required to attend the daily ward clinics in the University Hospital and ward clinics in the Garfield Memorial Hospital, Children's Hospital, and the Tuberculosis Hospital of the District of Columbia.

The system of ward clinics to small groups of students affords a most effective method of studying disease and gives to every student an opportunity of following a large assortment of diseases from their commencement to the termination of illness; in no other way is it possible to get a more practical knowledge of the methods of studying disease or a more intimate knowledge of disease itself.

Every patient in the medical wards of the University Hospital is assigned to one, or at most two, senior students, who are required (under proper supervision) to take the history, to make and record a complete physical examination, to determine after due study the nature of the illness (diagnosis), to outline a plan of treatment, and to make daily notes of the progress of the case.

A weekly amphitheater clinic is given to third-year students in a body and a similar clinic to the fourth-year class. A series of special neurological clinics is provided for the senior class at the Government Hospital for the Insane, where there is a great wealth of material.

Second Year.

	Hours. Lect., Rec., Dem.	Clinics.	Total.
Physical Diagnosis	64	...	64
Third Year.			
General Medicine	128	128	256
Fourth Year.			
General Medicine	128	192	320
Totals	320	320	640

TROPICAL MEDICINE.

M. E. Higgins, M.D., Surg. U.S.N., Professor of Tropical Diseases,
Instructor in Bacteriology and Tropical Diseases,
U. S. Navy Medical School.

The course in tropical diseases is similar to that given in the Army and Navy Medical Schools, and consists of didactic lectures, quizzes, and laboratory instruction, with particular reference to the parasitic, protozoal diseases common in the tropics and in the southern part of the United States.

Fourth Year.

	Hours.
Tropical Medicine, 1 hour, Feb.-May	16

PSYCHIATRY AND CLINICAL NEUROLOGY.

WILLIAM A. WHITE, M.D., Superintendent of the Government Hospital for the Insane.....Professor of Psychiatry and Clinical Neurology
B. J. LOGIE, M.D.....Instructor in Neurology
H. W. MILLER, M.D.....Instructor in Psychiatry and Neurology
F. M. BARNES, M.D.....Instructor in Psychiatry and Neurology

A series of lectures and clinics is given upon the subject of insanity in its various forms.

These clinics are given at the Government Hospital for the Insane, which, with its more than two thousand beds, affords one of the largest clinics in this country.

Fourth Year.

	Hours.
Psychiatry and Neurology, 1 hour, Jan.-May. DR. WHITE.....	20
Clinical Psychiatry, 1 hour, Jan.-May. DRS. MILLER and BARNES..	20

PEDIATRICS.

GEORGE N. ACKER, A.M., M.D.....Professor of Pediatrics
EDGAR P. COPELAND, M.D.....Associate in Pediatrics
H. H. DONNALLY, M.D.....Clinical Associate in Pediatrics
FRANK LEECH, M.D.....Clinical Associate in Pediatrics
W. J. FRENCH, M.D.....Instructor in Pediatrics

Didactic and clinical lectures, bedside and dispensary clinics are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

The children's clinic, at the Children's Hospital, affords ample material for practical teaching in this branch.

Fourth Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Pediatrics	32	62	94

PHYSICAL DIAGNOSIS.

W. W. WILKINSON, M.D.....Associate in Medicine

A complete course is given in this subject by means of recitations, section work on normal subjects, and with clinical cases which typically represent diseased conditions.

Second Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Physical Diagnosis	32	32	64

SURGERY.

William Cline Borden, M.D.....Professor of Surgery
A. R. Shands, M.D.....Professor of Orthopedic Surgery
Arthur A. Snyder, M.D.....Clinical Professor of Surgery
Francis R. Hagner, M.D.....Professor of Genito-Urinary Surgery
L. A. La Garde, M.D.....Professor of Military Surgery
Charles S. White, M.D.....Associate in Surgery
John R. Wellington, M.D.....Clinical Professor of Surgery
W. F. M. Sowers, A.B., M.D.....Associate in Surgery
L. H. Reichelderfer, M.D.....Clinical Professor of Surgery
Charles W. Hyde, M.D.....Instructor in Minor Surgery
A. L. Hunt, M.D.....Instructor in Minor Surgery
E. T. M. Franklin, M.D.....Instructor in Surgery
Cline Chipman, M.D.....Instructor in Minor Surgery
H. H. Kerr, M.D.....Instructor in Surgery

The principles of surgery are presented in a systematic course of lectures, so that the student may obtain a comprehensive and adequate concept of the science and art of surgery. These lectures are followed by recitations held twice a week, so that the subject-matter may be thoroughly impressed upon the students. The special divisions of surgery are taught by associates and instructors who have made specialties of these branches. The clinical material in the University Hospital and Dispensary, being under the control of the Faculty, is directly used throughout the course to illustrate the subjects taught and to familiarize the students with actual clinical conditions.

Surgical technique is taught by instruction in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the patient, and the sterilization of instruments. Practical instruction is given in the Hospital and Dispensary in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Thorough instruction and practical demonstrations are given in the administration of anæsthetics.

Clinical teaching is carried on in the University Hospital and Dispensary, and in other hospitals of the city to which members of the Faculty are attached. Amphitheater clinics are given, in which the general practice of surgical diagnosis and operative technique and therapeutic procedure are shown. Senior students are assigned in rotation to individual cases in the wards of the University Hospital.

Ward clinics and bedside instruction are made a prominent part of the course. The class is divided into sections, which are regularly assigned to clinical work in the University Hospital and Dispensary, and in other hospitals.

Practical work is required of each student in the preparation of dressings, sterilization of instruments, etc.

In the third year a thorough course is given in surgical anatomy and operative surgery on the cadaver, in connection with which the instructor takes up a general review of anatomy, so that the student may be thoroughly prepared for State Board examinations after graduation.

Second Year.

	Hours. Lect., Rec., Dem.	Clinics.	Total.
Minor Surgery	64	...	64

Third Year.

General Surgery	96		
Surgical Pathology	24		
Fourth Year.		256	496
General Surgery	96		
Orthopedics	24		
Genito-Urinary	24		
Gunshot Wounds	8		
Totals	324	256	580

SURGICAL PATHOLOGY.

W. F. M. Sowers, M.D.....Associate in Surgery

Surgical pathology is taught by thorough instruction in the gross and microscopic appearance of surgical diseases and injuries, and by a systematic course of lectures and quizzes by which the etiology, pathology, symptomatology, and treatment of the surgical affections and their relations to each other are shown.

ORTHOPEDICS.

A. R. Shands, M.D.....Professor of Orthopedics

A course of lectures and recitation on the pathology, etiology, course, termination, and treatment of chronic joint diseases, with clinical instruction in the application of special apparatus and of plaster of Paris to the correction of deformities.

GENITO-URINARY DISEASES.

FRANCIS R. HAGNER, M.D.....Professor of Genito-Urinary Diseases

A thorough course of instruction in genito-urinary diseases is given by lectures, recitations, section clinics, and bedside teaching.

GUNSHOT WOUNDS.

LOUIS A. LA GARDE, M.D.....Professor of Military Surgery

The treatment of gunshot wounds with special reference to civil practice is given in a course of lectures and demonstrations, fully illustrated by lantern slides, X-ray photographs, and actual specimens from the Army Medical School.

OBSTETRICS.

A. F. A. KING, A.M., M.D., LL.D.....Professor of Obstetrics
H. W. LAWSON, B.S., M.D.....Associate Professor of Obstetrics
JULIAN M. CABELL, M.D.....Clinical Professor of Obstetrics
E. W. TITUS, M.D.....Instructor in Obstetrics
A. Y. P. GARNETT, M.D.....Instructor in Obstetrics

The course in Obstetrics comprises a series of lectures on the science and art of midwifery, together with practical work. The chief purpose of the lecturer is to arrange, simplify, and explain the matters studied in the text-books so as to render them more easily intelligible and to indicate their relative importance. The lectures are illustrated by diagrams, models, manikins, natural preparations, and instruments. The class is divided into sections, and each student performs various obstetrical operations upon the manikin and receives practical instruction in external pelvimetry and the methods of abdominal palpation and auscultation during pregnancy. Recitations from text-books are held throughout the term. In the fourth year clinical instruction in obstetrics is given, the class being divided into small sections and each section being given bedside instruction and the individual students are required to attend a stated number of cases.

Third Year.

	Hours. Lect., Rec., Dem.	Clinics.	Total.
Obstetrics	128	*	128
Fourth Year.			
Obstetrics	32	*	32
Totals	160	...	160

* Number of clinic hours cannot be given, but each student is required to attend five cases, exclusive of demonstration work.

GYNECOLOGY.

J. Wesley Bovee, M.D.....Professor of Gynecology
G. Brown Miller, M.D.....Associate in Gynecology
A. L. Stavely, M.D.....Clinical Professor of Gynecology
W. A. Frankland, M.D.....Instructor in Clinical Gynecology
J. Lewis Riggles, M.D.....Instructor in Gynecology
Vergil B. Jackson Instructor in Gynecology
Adam Kemble, M.D.....Instructor in Gynecology

Gynecology as taught in the third year comprises a course of lectures and text-book recitations. In the fourth year individual students are assigned to cases in the wards of the University Hospital, and the class is taken in sections of one to two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater clinics given by the Professor of Gynecology and Clinical Gynecology.

Third Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Gynecology	32	32	64

Fourth Year.

	Hours.		
	Lect., Rec., Dem.	Clinics.	Total.
Gynecology	32	32	64
Totals	64	64	128

LARYNGOLOGY AND OTOLOGY.

Charles W. Richardson, M.D..Professor of Laryngology and Otology
O. A. M. McKimmie, M.D.....Instructor in Laryngology and Otology
H. S. Dye, M.D.....Instructor in Laryngology and Otology
E. G. Seibert, M.D.....Instructor in Laryngology and Otology

The course comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

Fourth Year.

	Hours.
Lectures, 3 hours, Oct.-Nov. Professor Richardson.....	24
Clinics. Professor Richardson, Dr. Dye, Dr. McKimmie, and Dr. Seibert	24

OPHTHALMOLOGY.

W. K. Butler, M.D.....Professor of Ophthalmology
D. Kerfoot Shute, A.B., M.D..Associate Professor of Ophthalmology
E. G. Seibert, M.D.....Instructor in Ophthalmology

The course of lectures on this subject is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist, but to give him a knowledge of what every general practitioner ought to know. The course is supplemented by clinical instruction.

Fourth Year.

	Hours.
Lectures, 1 hour, Oct.-Dec. Professor Butler.....	12
Clinics. Professors Butler and Shute and Dr. Seibert.....	12

DERMATOLOGY.

R. B. Carmichael, M.D.....Professor of Dermatology
C. A. Simpson, M.D.....Instructor in Dermatology

The lectures in this course will be principally clinical, supplemented by didactic lectures, illustrated by diagrams, models, and photographic illustrations of disease from life.

Fourth Year.

	Hours.
Lectures, 1 hour, Oct.-Dec. Professor Yarrow.....	14
Clinics, Oct.-Dec. Professors Yarrow and Carmichael.....	12

HYGIENE.

D. W. Prentiss, M.D.....Professor of Hygiene

The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative control of public health.

Fourth Year.

	Hours.
Lectures and recitations, 1 hour. Professor Prentiss.....	32

MEDICAL JURISPRUDENCE.

W. C. WOODWARD, M.D.....Professor of Medical Jurisprudence

This course is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

Third Year.

	Hours.
Lectures, 1 hour, Feb.-May. Professor WOODWARD.....	16

CLINICAL FACILITIES.

The following hospitals are open to the students of this school for clinical study, and are extensively used for that purpose:

University Hospital and the University Dispensary, H St., between Thirteenth and Fourteenth Sts., N. W., and adjacent to the Medical Building.—The Hospital and Dispensary are part of the educational equipment of the University. They are integral parts of the Department of Medicine, are entirely controlled by the Faculty of Medicine, and are used primarily in instructing the students in clinical medicine, surgery, and obstetrics. The Dispensary has a large out-patient service in all departments, to which several thousand visits are made annually. The staff is composed of members of the Faculty of Medicine.

Garfield Memorial Hospital, Florida Ave. and Tenth St., N. W.—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital. There is also an out-patient department, giving good opportunities for experience in the practice of physical diagnosis.

Members of the Faculty on the visiting staff: Professors CLAYTOR and MORGAN, Clinical Medicine; Professors SNYDER, WELLINGTON, and REICHELDERFER, Clinical Surgery; Professor STAVELY, Clinical Gynecology; Professor CARMICHAEL, Clinical Dermatology; Professors SHUTE and BUTLER, Clinical Ophthalmology; Professor HAGNER, Clinical Genito-Urinary Surgery; Professor YARROW, Consulting Physician; Dr. CABELL, Clinical Obstetrics.

Children's Hospital, W St., between Twelfth and Thirteenth Sts., N. W.—Regular instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department.

Members of the Faculty on the visiting staff: Professors KING and YARROW, Consulting Physicians; Professor WELLINGTON, Clinical Surgery; Professor ACKER and Drs. COPELAND, DONALLY, and LEECH, Clinical Medicine.

Emergency Hospital and Central Dispensary, Fifteenth St. and Ohio Ave., N. W.—This hospital has 36 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in clinical surgery.

Members of the Faculty on the visiting staff: Professor HAGNER, Clinical Genito-Urinary Diseases; Drs. WHITE and JACKSON, Surgery; Professor MORGAN and Dr. ELLIOTT, Clinical Medicine; Professor CARMICHAEL, Clinical Dermatology; Dr. MILLER, Clinical Gynecology; Professor SHANDS, Orthopedics; Professor SHUTE, Ophthalmology; Dr. FRENCH, Pediatrics.

Columbia Hospital for Women, Twenty-fifth St. and Pennsylvania Ave., N. W.—This hospital has 68 charity beds for diseases peculiar to women, and 50 charity maternity beds. Both the obstetrical and the gynecological services are particularly good.

Members of the Faculty on the visiting staff: Professor BOVÉE and Dr. MILLER, Clinical Gynecology; Drs. KELLY, CABELL, and RIGGLES, Clinical Obstetrics; Professor SHUTE, Ophthalmology; Professor RUFFIN, Visiting Physician.

Providence Hospital, Second and D Sts., S. E.—This institution has a large charity service—100 beds for medical and surgical cases and 30 maternity beds.

Members of the Faculty on the visiting staff: Professor RICHARDSON, Clinical Laryngology and Otology; Professor SHUTE, Clinical Ophthalmology; Dr. SOWERS, Clinical Surgery; Professor CARMICHAEL, Dermatology; Dr. MORSE, Obstetrics.

The Government Hospital for the Insane.—This hospital is maintained by the United States Government. It has 2,500 beds. Clinical instruction in mental diseases is given by the superintendent of the hospital, Professor W. A. WHITE, and Drs. MILLER and BARNES. Other members of the Faculty on service at this hospital are Professor FRANZ; Professor SHUTE, Consulting Ophthalmologist; Professor RUFFIN, Consulting Physician.

Episcopal, Eye, Ear, Throat, and Nose Hospital, Fifteenth St., between L and M Sts., N. W.—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital.

Members of the Faculty on its staff: Professor RICHARDSON, Clinical Otology and Laryngology; Drs. MCKIMMIE and DYE, Clinical Otology and Laryngology; Professor ACKER, Consulting Physician.

Lutheran Dispensary, Fourteenth and N Sts., N. W.—This dispensary affords good opportunities for clinical study of diseases of the eye, ear, throat, and nose.

Members of the Faculty on its staff: Professor BUTLER, Surgeon-in-Charge; Dr. SEIBERT, Ophthalmology; Professor ACKER, Consulting Physician.

Casualty Hospital, 708 Massachusetts Ave., N. E.—Opportunities in emergency and dispensary work are offered by this institution.

Members of the Faculty on its staff: Professor ACKER, Consulting Physician; Dr. BARNES, Clinical Medicine.

Woman's Clinic, 1237 T St., N. W.—Members of the Faculty on its staff: Professor YARROW, Consulting Physician; Professor SNYDER, Attending Surgeon.

Tuberculosis Hospital, Fourteenth and Upshur Sts., N. W.—Members of the Faculty on its staff: Professor CLAYTOR and Dr. RANDOLPH, Clinical Medicine; Dr. REICHELDERFER, Clinical Surgery; Professor RICHARDSON, Ophthalmology.

CLASSIFICATION AND ADVANCEMENT OF STUDENTS.

Students are divided into four classes, according to their proficiency and the time spent, viz: first year, second year, third year, and fourth year.

Proficiency in all subjects is marked on the scale of 100.

Examinations are held at the end of the course in each subject.

In determining the proficiency of a student his laboratory and clinical work, his quiz record, attendance, and result of examination are all considered.

To be *advanced* a student must obtain a general average of 75 or more in all subjects of the year, and must not fail in more than one major or two minor subjects.

Students who obtain a general average of 75 or more, but who fail in not more than one major or two minors, may be advanced **conditioned** and may be permitted at the next examination period a re-examination in the subjects in which they fail, but all conditions must be removed before a student can be again advanced.

Students who fail of advancement or graduation will not be allowed re-examination, except by special permission of the Faculty, and must

repeat all subjects in which they obtained less than 85 during the year, and pass an examination on all majors of preceding years in which they obtained less than 85 before they can be advanced or graduated. Students who fail to appear at the regular examinations will not be examined until the next regular examination, except by special permission of the Faculty. In special examinations a fee of $5.00 will be charged for each subject. Students who fail to pass satisfactorily their practical laboratory examinations will be required to repeat the laboratory courses. Students will not be admitted to examination unless they have paid all fees due at the time.

A student who has failed of graduation after repeating his final year will not be permitted to maintain his connection with the school.

REQUIREMENTS FOR GRADUATION.

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission and other requirements herein set forth. He must have attended at least 80 per cent of all required instruction during four sessions of eight months each in four separate years, must have satisfactorily completed all his courses and passed all his examinations. He must be present at the time specified for the final examinations, and also at Commencement. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges who desire degrees must spend one year in residence at this school.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated at "having graduated with distinction." If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction."

SCHOLARSHIPS.

Four scholarships are provided for students.

Corcoran Scholarships.—In recognition of the liberality of the late W. W. Corcoran in endowing the University for the Department of Medicine, the Faculty of Medicine has established in the department four free scholarships.

Two of these scholarships are open for competitive examination to the graduates of the several high schools of the District of Columbia and are awarded to the two students whose averages are highest.

One scholarship is open for competitive examination to graduates

of any reputable high school or college who shall give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry, and is awarded to the graduate whose average is highest.

The remaining scholarship is open for competitive examination to students who, though not graduates of any high school or college, give satisfactory evidence that they are fitted by previous education for the study of medicine, and at the same time give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry, and is awarded to the student whose average is highest.

In establishing these averages professional aptitude and general qualifications are considered along with scholastic ability.

Applications for scholarships should be filed with the Dean not later than May 15. Students holding scholarships pay the matriculation, library, laboratory, and graduation fees, and make the deposit to cover breakage. Holders of scholarships must maintain a satisfactory scholastic average.

PRIZES.

A prize from the Ordronaux Prize Endowment will be awarded under conditions determined by the University authorities.

Professor ACKER gives a prize for the best examination in Pediatrics.

Professor BUTLER gives a prize for the best examination in Ophthalmology.

Professor HAGNER gives a prize for the best examination in Genito-Urinary Diseases.

HOSPITAL APPOINTMENTS.

Interns are annually appointed in the University Hospital. The externs are appointed from the student body. These appointments are made upon competitive examinations under conditions determined by the governing authorities of the Hospital. Appointments to similar positions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital, Emergency Hospital, Columbia Hospital for Women, Casualty Hospital, Providence Hospital, Washington Aslyum Hospital, Children's Hospital, Episcopal Eye, Ear, Throat, and Nose Hospital.

FEES AND CONTINGENT EXPENSES.

1. Matriculation (payable but once)	$5
2. Annual library fee	3
3. Tuition fee per annum, including all charges for materials	150
4. Graduation fee	10
5. Fee for a certificate under the seal of the University	2

A deposit of $10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.

Persons are allowed to register as auditors for the regular fees without being required to take active part in the exercises or to pass examinations but no credit will be allowed for such attendance.

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them form the University at the following rates:

Microscope for Histological Laboratory use..... $5
Microscope for Bacteriological, Pathological, and Clinical Microscopy Laboratory use 6

Matriculation, library, other fees and deposits are due in full in advance. Tuition may be paid in eight monthly installments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond of $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Dean.

WITHDRAWALS.

A certificate of work actually done will be given to any student wishing to withdraw or transfer to some other school during the session. Written notice of such withdrawal or transfer must be filed with the Dean at the time of requesting the certificate, and the student must have paid all fees and dues chargeable against him up to the end of the month in which he wtihdraws.

BOARD AND ROOMS.

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE DEAN,
Department of Medicine,
The George Washington University,
1325 *H Street, N. W.,*
Washington, D. C.

DEPARTMENT OF DENTISTRY

FACULTY.

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY
JOHN ROLAND WALTON, D.D.S.....Dean and Professor of Prosthetic Dentistry and Orthodontia
DANIEL KERFOOT SHUTE, M.D.....Professor of Neuro-Anatomy
HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry
CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor of Chemistry
SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology
CHARLES STANLEY WHITE, M.D.....Profesor of Oral Surgery
FREDERICK FULLER RUSSELL, M.D.....Professor of Bacteriology and Pathology
NOBLE PRICE BARNES, M.D.....Professor of Materia Medica and Therapeutics
MATHEW KOLLIG, M.D.....Professor of Anatomy
JOHN ROBERT DE FARGES, D.D.S.....Associate Professor of Dental Metallurgy. Jurisprudence, Economics, and Ethics
CHARLES TURK BASSETT, D.D.S.....Associate Professor in Charge of the Dental Infirmary
ALLEN SCOTT WOLFE, D.D.S.....Associate Professor of Crown and Bridge Work
CADMUS LINDEN ODOR, D.D.S.....Associate Professor of Operative Technics
WILLIAM FRANCIS LAWRENCE, D.D.S.....Associate Professor of Prosthetic Technics
CHARLES FRANKLIN CRAIG, M.D.....Associate Professor of Pathology and Bacteriology
ARTHUR BARTON CRANE, D.D.S....Associate Professor in Oral Surgery
D. DEWITT BEEKMAN, D.D.S...Associate Professor of Materia Medica and Therapeutics
EDWARD GRANT SEIBERT, M.D.....Associate in Chemistry
FRANK ADELBERT HORNADAY, S.B., M.D.....Associate Professor of Chemistry
HARRY RANDALL ELLIOTT, M.D.....Associate in Physiology
WILBUR R. BRANDENBURG, M.D.....Associate in Bacteriology and Pathology
J. LEWIS RIGGLES, M.D.....Associate in Anatomy
HENRY JAMES NICHOLS, M.D.....Associate in Bacteriology and Pathology
JOHN WINSLOW TAYLOR, D.D.S.....Instructor in Prosthetic Technics
CHARLES GARDNER SHOEMAKER, D.D.S.....Instructor in Operative Technics

HENRY CISSELL YOUNG, D.D.S.....Instructor in Prosthetic Technics
HERBERT CORNWELL HOPKINS, D.D.S.....Lecturer on Orthodontia Technics
JOHN POTTS FILLEBROWN, M.D.....Instructor in Psysiology
ALBERT PERKINS TIBBETS, A.B., M.D.....Instructor in Anatomy
GEORGE MILLER SHARP, D.D.S.....Lecturer on Oral Prophylaxis
RALPH MICHELL LECOMTE, M.D.....Instructor in Pathology and Bacteriology
CHARLES HARVEY BOWKER, M.D., Ph.D.....Instructor in Anatomy
MARION EDWYN HARRISON, D.D.S....Demonstrator in Dental Infirmary

GENERAL STATEMENT.

The first course of lectures in the Dental School began November, 1887, under the title of "The Columbian University Dental Department." The course then extended over two years of five months each. Two years later the course was extended to seven months; but, this additional time being found inadequate to keep pace with the ever-increasing demand for higher dental education, the course was gradually increased, until now it extends over three years of eight months each.

The next academic year begins on Wednesday, September 25, 1912, and ends on Wednesday, June 11, 1913. Students should register promptly at the office of the Dean at the beginning of the session, and no student can be received and credited with a full term after ten days from the first lecture. Final examinations are held at the conclusion of the instruction in each subject. The degrees are conferred at Commencement, June 11. For further information communicate with the Dean of the Dental Department or the Secretary of the University.

ADMISSION.

Candidates for matriculation must show that they are fitted by previous education to study dentistry. For this purpose they must present a satisfactory certificate of their attainments from an approved school or college, or they must pass an examination.

Candidates are admitted without examination:

(1) Upon presenting a diploma or certificate of a reputable college conferring on them the degree of A.B. or S.B., or an equivalent degree in the arts and sciences.

(2) Upon presenting a diploma or certificate of graduation from a high school, academy, or preparatory school approved by the University as maintaining an adequate standard.

(3) Upon presenting a certificate of admission to the Freshman class of an approved college.

(4) Upon presenting a certificate of admission to another dental school approved by the University as maintaining an adequate standard.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement

of an accredited high school or its equivalent, modified to meet the regulations of State Dental Boards.

The scope of the different subjects is indicated in standard high school text-books.

A candidate may offer certificates of an approved school for work done in any preparatory subjects, and will be credited with the units represented by such work. A candidate failing to pass in two of three subjects of his examination may be admitted to the first year upon the condition that he make up the deficiency before entering the second-year class. The examinations are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

The examinations for admission will be held in June and September, at the Dental Department. An applicant deficient in either Latin or Physics, or both, may be admitted to the first-year class conditioned in those subjects, but such conditions must be made up during the first year.

AUDITORS.

Persons are allowed to register as auditors for the regular fees without being required to take active part in the exercises or to pass examinations, but no credit will be allowed for such attendance only.

COURSE OF INSTRUCTION.

The course of instruction extends through three years of eight months each. The subjects taught during the course are divided as follows:..

FIRST YEAR.	SECOND YEAR.	THIRD YEAR.
Anatomy.	Organic Chemistry.	Operative Dentistry.
Physiology.	Operative Dentistry.	Orthodontia.
General Chemistry.	Prosthetic Dentistry.	Prosthetic Dentistry.
Histology.	Pathology.	Comparative Dental Anatomy.
Operative Technics.	Materia Medica	Oral Surgery.
Prosthetic Technics.	Operative Technics.	Orthodontia Technics.
Special Anatomy.	Prosthetic Technics.	Metallurgy.
	Infirmary Practice.	Prosthetic Technics.
	Bacteriology.	Infirmary Practice.
	Dental Histology.	Dental Therapeutics.
	Orthodontia Technics.	Dental Pathology.
	Infirmary Practice.	Dental Bacteriology.
	Clinics.	Dental Jurisprudence, Economics and Ethics.
		Infirmary Practice.
		Clinics.

These studies are further described in the following pages.

Hours of reciation, daily from 4.50 p. m. to 10.30 p. m.; 6.30 to 7,30 p. m., dinner hour.

PROSTHETIC DENTISTRY AND ORTHODONTIA.

JOHN ROLAND WALTON, D.D.S.....Professor
HERBERT CORNWELL HOPKINS, D.D.S.....Lecturer

1. PROSTHETIC DENTISTRY. All branches in this department will be under the supervision of the professor. He will deliver the lectures and manage in person and through his assistants the quiz work and course of instruction. This system will prevent confusion in method and technical procedures.

2. ORTHODONTIA. Junior year Orthodontia is a technical course with lectures and demonstrations. The Senior year is a review of the Junior studies with advanced lectures upon the irregularities of the teeth, local and constitutional. Each student is required to make a number of appliance upon models and practically correct cases of irregularity.

OPERATIVE DENTISTRY, DENTAL ANATOMY AND PATHOLOGY.

HENRY CLAY THOMPSON, D.D.S.....Professor

This course embraces lectures on the special anatomy and physiology of the teeth. The origin, growth, and eruption of the teeth receive minute attention, and are illustrated as their importance demands.

The methods of treating, filling, and extracting teeth receive attention in the lecture-room, and are demonstrated clinically by proficient operators. Extended consideration is given to dental pathology and therapeutics. This chair has personal supervision of the department of Operative Technics.

CHEMISTRY.

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor
FRANK ALBERT HORNADAY, S.B., M.D.....Associate Professor
EDWARD GRANT SEIBERT, M.D.....Associate

The instruction in this subject embraces:

A short discussion of the principles of Physics in their relation to Chemistry, the principle of chemical philosophy, and the laws of chemical combination.

A study of the elements, metallic and non-metallic; the preparation,

properties, and reaction of their different compounds and their application in dentistry; Organic Chemistry, with special attention to those organic compounds that are of pratical use; laboratory instruction in the determination of acids and bases, analyses of alloys, etc.

PHYSIOLOGY.

Shepherd Ivory Franz, Ph.D.....Professor
Henry Randall Elliott, M.D.....Associate
John Potts Fillebrown, M.D.....Instructor

This subject is taught in lectures, recitations, and laboratory exercises. In the lectures and recitations special emphasis is placed upon those parts of physiology that have a known bearing upon dental medicine and sugery, especially digestion, secretion, and the nervous system. Three laboratory periods a week during a semester give the student first-hand knowledge of the principal facts about the general functions of tissues, and the special functions of the nervous system, the special senses, the heart, circulation, digestion, and respiration.

ANATOMY.

Daniel Kerfoot Shute, M.D.....Professor
Matthew Kollig, M.D.....Professor
J. Lewis Riggles, M.D.....Associate
Albert Perkins Tibbets, A.B., M.D.....Instructor
Charles Harvey Bowker, M.D., Ph.D.....Instructor

The instruction in Anatomy is given in a graded course of lectures, recitations from prescribed text-books, and especially by practical work in the dissection of the cadaver. The lectures are illustrated by the use of dry and wet dissections of the cadaver, by models, diagrams, charts, and sciopticon views.

Practical work in osteology and in dissection of the head are of fundamental importance. For the study of these subjects the class is divided into sections in order to make the instruction as practical as possible. The bones of the skeleton are placed in each student's hands, and he is instructed and quizzed upon all their important features.

METERIA MEDICA AND THERAPEUTICS.

Noble Price Barnes, M.D.....Professor
D. DeWitt Beekman, D.D.S.....Associate Professor

Instruction in these subjects embraces:

The study of crude drugs and their preparations and the art of prescribing; the physiological action of drugs in the human system; the

practical application of drugs and other therapeutical agencies to the prevention and cure of diseases and the relief of suffering, together with their antidotal relation to poisons.

The subject is taught by means of lectures, recitations, and blackboard illustrations, and is made practical to as great a degree as is compatible with a sufficiently thorough understanding of its principles.

In connection with this chair is a pharmaceutical laboratory, well equipped with modern appliances, in which are taught the making of typical preparations of the Pharmacopoeia, prescription writing, and the compounding of prescriptions.

Special attention is given to those drugs that are of most value in the practice of dentistry.

ORAL SURGERY.

CHARLES STANLEY WHITE, M.D.....Professor
ARTHUR BARTON CRANE, D.D.S.....Associate Professor

Instruction in this subject will consist of didactic lectures, recitations, case histories, together with clinics at regular intervals.

The lectures will deal with surgical bacteriology and pathology, surgical technique, anesthesia, wounds, hemorrhage, shock, new growths, constitutional diseases, plastic operations upon the palate and face, dislocation and fracture of the maxillae. Charts, diagrams, photographs and stereopticon slides will supplement the lectures.

In the clinics at the Emergency Hospital, illustrative cases will be shown. The student will be expected to attend such operations which pertain to this subject.

HISTOLOGY.

MATTHEW KOLLIG, M.D.....Professor
ELIJAH WHITE TITUS, M.D.....Instructor

The course in Histology consists in a systematic presentation of the subject of the minute anatomy of the various parts of the body, especial attention being devoted to the histology of the teeth and neighboring structures. The subject is presented partly by systematic lectures, and more especially by the practical study by the individual students of actual specimens under the microscope. The methods of preparation of microscopical specimens are presented and practiced in the laboratory. The projection microscope, affording valuable aid in illustrating and presenting the subject, is constantly used.

PATHOLOGY AND BACTERIOLOGY.

FREDERICK FULLER RUSSELL, M.D.....Professor
CHARLES FRANKLIN CRAIG, M.D.....Associate Professor
HENRY JAMES NICHOLS, M.D.....Associate
WILBUR R. BRANDENBURG, M.D.....Associate
JOHN BRADFORD BRIGGS, M.D.....Associate
RALPH MICHELL LECOMTE, M.D.....Instructor

The course begins with a consideration of the principles involved in the process of sterilization by dry and moist heat, the relative value and mode of application of each, and an explanation of the construction of the apparatus employed for the purpose. The use and construction of the thermostat is taken up at the same time and the student taught how he can dispense with these costly appliances in emergencies.

The composition and modes of preparation of the various nutritive media are next considered, working formulas given, and the student required to prepare them at least once in the laboratory. This is followed by a discussion of bacteria as a class, their position in the biological world, their classification, distribution, and the general and special characters that belong to them.

After this preparatory training the various methods in use for the isolation and study of bacteria are taught by practical demonstration and practiced by the students, after which the most important pyrogenic organisms are studied in detail, giving special attention to those found in the nasal and oral cavities.

The aim of the course is chiefly to afford the students an opportunity to become practically familiar with bacteriological working methods, and to enable them to isolate and identify the bacteria present in suppurative processes, as well as to comprehend intelligently the references to mico-organisms in the current professional literature of the day.

PROSTHETIC TECHNICS.

WILLIAM FRANCIS LAWRENCE, D.D.S..Associate Professor, Senior Year
JOHN WINSLOW TAYLOR, D.D.S.....Instructor, Junior Year
HENRY CISSEL YOUNG, D.D.S.....Instructor, Freshman Year

The technic laboratories are thoroughly equipped for their particular work. The course in prosthetic technics extends through the Freshman, Junior, and Senior years.

The first year is a technical and didactic course. The students are taught the proper equipment of a dental laboratory; the preparation of the mouth for dentures; methods of taking impressions of the mouth and manipulation of the various impression materials; the preparation

and mounting of models; selection and artistic arrangement of teeth; the construction of plastic dentures and crowns with general details.

In the Junior class the course is a review of the Freshman year with extended technical and didactic work, embracing a practical course in the swaging of the various metals, as taking impressions, making models and dies, swaging, rimming, attaching teeth by rubber, and in general construction of metal dentures, crown and bridge work.

The Senior year is a practical course, embracing the swaging of plates, teeth attached by soldering, clasps porcelain work, advanced bridge-work, removable bridges, and the detailed construction of all work in prosthetic dentistry.

The work of the Department is under the immediate supervision of the associate professor.

OPERATIVE TECHNICS.

CADMUS LINDER ODOR, D.D.S.....Associate Professor
CHARLES GARDNER SHOEMAKER, D.D.S.....Instructor

This subject is taught by lectures, illustrated by enlarged models and drawings, together with demonstrations of instruments and materials. The students perform exercises in manipulative procedure under the direction of the instructors.

The subjects embraced in the course consist, first, of the study of dental nomenclature, that the student may acquire an understanding of the technical terms used in the course of his dental studies. This is followed by descriptive dental anatomy and the forms and surface markings, of each tooth studied, the natural teeth, as well as enlarged models and drawings being used for the purpose. Each student is required to make various sections of the teeth for the thorough study of the pulp chambers and root canals and their relations to the external surface of the teeth.

That tooth-forms may be more perfectly impressed upon the mind of the students, each one is required to carve a tooth of the several classes, as incisor, cuspid, bicuspid, and molar, in bone or artificial ivory, representing the actual form and size of the natural organ. Cavities are classified and illustrated by drawings and models, followed by their preparation and filling in technic forms by the student. Treating and filling root canals is given full attention, the students performing operations of this kind upon natural teeth mounted for the purpose.

All work, in its relation to operative dentistry, is given the necessary consideration to fit the student for meeting, as far as possible, the actual requirements of the infirmary. The operations in the technic department require a large number of natural teeth and a sufficient supply is difficult to obtain.

COMPARATIVE DENTAL ANATOMY.

The senior students will study in this course the food habits and the teeth of animals. The forms of teeth and their uses as weapons of offense and defense will be studied.

CROWN AND BRIDGE WORK, GOLD INLAY, AND PORCELAIN.

ALLEN SCOTT WOLFE, D.D.S.....Associate Professor

METALLURGY.

JOHN ROBERT DE FARGES, D.D.S.....Associate Professor

The subject of Mettallurgy taught in the chemical laboratory will be reviewed and an extended course will be given in metals, alloys, and amalgams which are used in dentistry.

PROFESSIONAL ETHICS, DENTAL JURISPRUDENCE, AND ECONOMICS.

These lectures on ethics consist of a brief statement of the moral obligations of professional men to each other and to their patients the duty of upholding the honor and dignity of the profession, and the differences between the profession and business or manufacturing pursuits.

The lectures on jurisprudence will follow the text-book by Dr. Rehfuss, which fully elucidates the legal relation of the dentist to his patients, the importance of dental records, the limitations of dental practice, the liabilities incurred by those who administer anesthetics, the penalties, etc.

ECONOMICS. This course will instruct the student in the proper methods to insure a practice and to retain patients; will discuss business relations between patients and dentist, fees, book and card systems, and the general economy in conducting an office.

Instruction in this course is systematically given by lectures and clinics. The course in technique extends through the Freshman, Junior, and Senior years.

Students are taught the principles and practice of inlay work, porcelain crowns, high and low fusing bodies, the use of the electric and gas furnaces.

ORAL PROPHYLAXIS.

GEORGE MILLER SHARP, D.D.S.....Lecturer

This subject will be taught didactically, and clinically practical work by the students in the treatment of the oral cavity will be required.

THE DENTAL INFIRMARY.

CHARLES TURK BASSETT, D.D.S.....Associate Professor in Charge
MARION EDWYN HARRISON, D.D.S.....Demonstrator
JOHN WINSLOW TAYLOR, D.D.S.....Demonstrator
HENRY CISSELL YOUNG, D.D.S.....Demonstrator

The Infirmary is open every week-day the entire year. An abundance of clinical material is readily available. In fact, as many patients present themseves as can possibly be attended to by the students. It is under the immediate supervision of the Demonstrator in charge, who is present from 1 until 5 o'clock.

CLINICAL STAFF.

CAESARE LOUIS CONSTANTINI, D.D.S.....Clinician in Charge
ARTHUR DURDAN WEAKLEY, D.D.S....Clinical Instructor in Dentistry
THOMAS LOCKE RUST, D.D.S.....Clinical Instructor in Dentistry
GEORGE BERTRAM ROPER MACDONALD, D.D.S.....Clinical Instructor in Dentistry
WILLIAM CARL KILLINGER, D.D.S....Clinical Instructor in Orthodontia
MARK FLORUS FINLEY, D.D.S.....Clinical Instructor in Orthodontia
ALEXANDER DUNNINGTON COBEY, D.D.S.....Clinical Instructor in Non-Cohesive Gold
GEORGE MILLER SHARP, D.D.S.....Clinical Instructor in Special Crown Work
ZENAX WILBUR ALDERMAN, D.D.S.....Clinical Instructor in Electro-Therapeutics
ROBERT EDWIN LAYTON, D.D.S.....Clinical Instructor in Dentistry

TEXT-BOOKS AND WORKS OF REFERENCE.

(The works first named and in *italics* are preferred.)

ANATOMY.—*Cunningham's Text-book of Anatomy; Cunningham's Manual of Practical Anatomy;* Dental Anatomy, Black's.

PHYSIOLOGY.—*Text-books*: Haliburton's Physiology; Howell's Physiology; Tigerstedt's Physiology.

PATHOLOGY AND BACTERIOLOGY.—Delafield and Prudden's Pathology; Jordan's Bacteriology.

CHEMISTRY.—*Simon's Chemistry; Barha's College Chemistry; Holland's Medical Chemistry.*

MATERIA MEDICA.—*H. C. Wood's Therapeutics;* Hare's Practical Therapeutics; A. A. Stevens' Modern Materia Medica and Therapeutics; Culbreath's Materia Medica and Pharmacy; National Dis-

pensatory Reference Text-books, Osborne, Wilcox, Sollmann, Shoemaker, U. S. Pharmacopœia and National Formulary; Dental Materia Medica and Therapeutics (Prinz); Modern Dental Materia Medica, Therapeutics, and Pharmacology (Buckley); Medical Dictionary (Dorland).

Prosthetic Dentistry.—*The American Text-book of Prosthetic Dentistry;* Essig's Dental Metallurgy.

Operative Dentistry.—*Harris' Principles of Practice;* Tome's Dental Anatomy and Surgery; Taft's Operative Dentistry; American System of Dentistry (Litch); Kirk's Operative Dentistry; Johnson's Operative Dentistry.

Oral Surgery.—Scudder's Tumors of the Jaws; Ivy's Applied Anatomy and Oral Surgery.

Histology.—Nichols, Bohm and Davidoff; Anatomy and Histology of the Mouth, by Bromell.

Orthodontia.—Angle, Treatment of Malocclusion of the Teeth and Fractures of the Maxillæ; Talbot, Irregularities of the Teeth; Jackson, Orthodontia.

Dental Jurisprudence.—Rehfuss.

Dental Pathology and Therapeutics.—Burchard.

Comparative Dental Anatomy.—Thompson.

GRADUATION.

Candidates for graduation must have attended three full courses of lectures, each of eight months' duration, and three courses of clinical instruction in this Department, during the regular winter term and in separate years. Students are examined at the end of the regular course upon all subjects taught them during that course. Should the student fail in his examination in course, he may be reexamined in the fall. All fees must be paid and Infirmary requirements complied with before the student may present himself for examination.

Students must enter before, or within ten days after, the opening lecture of the regular course. They may register at any time during the Infirmary course, and thus begin Infirmary practice at once upon payment of twenty-five dollars, which amount will be deducted from their tuition fees for the succeeding regular term.

The candidate for graduation must be examined upon all subjects taught in this Department, and before the examination he must perform operations upon the natural organs in the Infirmary, and present the demonstrators in charge with a well-constructed specimen of dental mechanism made by himself in the dental laboratory of the University.

In addition to the above requirements, the moral character and habits of the candidate, his industry, and diligent attendance will be taken into consideration. Notable negligence, immorality, or habitual absence

from the lectures will preclude the candidate from attaining his degree, even though he may have acquired sufficient technical knowledge to pass a creditable examination. This reservation on the part of the Faculty of the right to make good moral character a prerequisite for graduation must not be overlooked.

The student also, during and between the sessions, must comply with the State laws regulating the practice of Dentistry, and act in accordance with the recognized code of ethics of the dental profession.

The degrees are conferred by The George Washington University, incorporated by Act of Congress of the United States.

COURSES IN ARTS AND SCIENCES.

Students taking a full course for a degree may be admitted without additional fee, except laboratory fees, to courses for which they are qualified, in the Department of Arts and Sciences, the aggregate of such courses not to exceed six hours per week.

LOCATION.

The Dental Building is No. 1325 H Street N. W. It is within half a square of all lines of street cars going to every part of the city.

The Dean may be seen personally at 724 9th Street N. W., on any week day, and also at the Dental Building, 1325 H Street N. W., on Tuesday and Thursday of each week at 4.30 p. m. during the session.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable once)	$5
2. Annual library fee	2
3. Tuition fee per annum, including all charges for materials	125
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms	2
5. Fee for graduation	10
6. Fee for a certificate under the seal of the University	2
7. A deposit of $10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.	

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

Students are furnished microscopes at the following rates:

Microscope for histological laboratory use..... $5

Microscope for bacteriological, pathological, and clinical microscopy laboratory use 6

The cost of installments for the first year amounts to about $20, and the cost of text-books to about $30.

PAYMENT OF FEES.

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in eight monthly instalments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. Fees are payable at the office of the Treasurer, 2024 G Street, or at the office of the Medical Department, 1325 H Street.

BOARD AND ROOMS.

A register of boarding-houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks and further information, address

J. Roland Walton, D.D.S., *Dean*,
724 9th Street N. W.

PART III

ASSOCIATED COLLEGES

National College of Pharmacy

College of Veterinary Medicine

Institutions in the District of Columbia organized as corporations under the Charter of the University, having separate financial foundations but educationally forming a part of the system of the University.

TRUSTEES OF THE NATIONAL COLLEGE OF PHARMACY

The President of the University, *ex officio.*

1913.

Wymond H. Bradbury.
Samuel Waggaman.
James K. Eppley.
Frank P. Weller.

1914.

Charles B. Campbell.
Lewis Flemer.
Herbert C. Easterday.
Willard S. Richardson.

1915.

Frank C. Henry.
Henry E. Kalusowski.
Samuel L. Hilton.
William T. Kerfoot.

Officers of the Board.

Chairman, Henry E. Kalusowski.
Vice Chairman, Lewis Flemer.
Secretary, Wymond H. Bradbury.
Treasurer, H. C. Easterday.

FACULTY OF THE NATIONAL COLLEGE OF PHARMACY.

CHARLES HERBERT STOCKTON, LL.D....PRESIDENT OF THE UNIVERSITY
HENRY E. KALUSOWSKI, M.D., Phar.D...Dean and Professor of Pharmacy
SAMUEL WAGGAMAN, M.D., Phar.D.....Professor of Materia Medica, Botany, and Toxicology
GEORGE A. MENGE, Ph.D.....Professor of Chemistry and Physics
HOWARD M. BRADBURY, Phar.D....Professor of Analytical Chemistry
BURTON J. HOWARD, B.S.....Professor of Microscopy
HENRY B. FLOYD, Phar.D.....Professor of Mercantile Pharmacy
ALEXANDER MUNCASTER, Phar.D., LL.B., LL.M.....Professor of Pharmaceutical Jurisprudence
DOUGLAS TSCHIFFLEY, Phar.D..Assistant to the Professor of Pharmacy
LORING W. BEESON, Phar.D.,
Assistant to the Professor of General Chemistry
HOMER K. BUTLER, Phar.D.,
Assistant to the Professor of Analytical Chemistry

CALENDAR.

1912

September 19, *Thursday*—Admission Examinations begin at 1 p. m., in the Lecture Room of the College.
Sepetmber 25, *Wednesday*—Forty-first Session begins.
November 28, *Thursday*—Thanksgiving Day, a holiday.

RECESS FROM DECEMBER 19, 1912, TO JANUARY 2, 1913, BOTH INCLUSIVE.

1913

February 22, *Saturday*—a holiday.
May 5, *Monday*—Annual Examinations for promotion and graduation begins.
June 11, *Wednesday*—Commencement.

GENERAL STATEMENT.

The National College of Pharmacy, which is the outgrowth of the Columbian Pharmaceutical Association, organized in April, 1871, was chartered under the provisions of an act of Congress in 1872, and opened its doors to students November 11 of that year. In February, 1906., it became a member of the educational system of The George Washington University, under the charter of the University granted by Congress March 3, 1905, providing for the organization of colleges. The President of the University is *ex-officio* president of the National

College of Pharmacy, and the College is represented in the President's Council by its Dean.

The work of the College embraces courses in chemistry, botany, materia medica and toxicology, pharmacy and pharmaceutical laboratory work, analytical chemistry, microscopy, mercantile pharmacy, and pharmaceutical jurisprudence. Three years are required for the completion of the prescribed course.

The new College building is centrally located on I street northwest, between eighth and Ninth streets. It is easily reached by either of the four principal street car lines of the city.

Preliminary Education and Examination.

The College requires of its Matriculants a knowledge of the branches usually taught in the public schools of Washington, D. C., to the extent of *two years in the high schools or its equivalent,* and they must be at least seventeen years of age. Evidence of this may be shown by certificates from reputable teachers or by the results of an examination to be held at the College, at one o'clock p. m., Thursday, September 19,1912.

Beginning with the session of 1914-15, candidates for admission to the College will be required to have three years' high school instruction or its equivalent. Beginning with the session of 1916-17, candidates will be required to have your years' high school instruction or its equivalent.

SPECIAL COURSES.

Students may select one or more of the branches taught and attend the lectures and laboratory work during the time set apart for such study.

Students taking single tickets are not entitled to take the examinations for the degree conferred by the College.

THE DEGREE.

The degree conferred is *Doctor of Pharmacy.*

QUALIFICATIONS FOR THE DEGREE.

1. The student shall have attended three courses of instruction in Chemistry, Pharmacy, Analytical Chemistry, Materia Medica, Botany, and Toxicology; and two in Microscopy, the last of which must have been in this College; and one course each in Mercantile Pharmacy and Pharmaceutical Jurisprudence.

2. He must have passed a satisfactory examination in each of the branches taught.

3. He must be recommended by the Board of Examiners.

MATERIA MEDICA, BOTANY AND TOXICOLOGY.

Freshman Course.

The first lectures are introductory to the study of elementary botany, after which follow vegetable histology and plant physiology. The subject-matter of these lectures is thoroughly explained by means of charts, diagrams, and specimens.

Junior Course.

This course is devoted to the consideration of the various theories concerning the vegetable world and the practical results obtained by experienced laborers in this science. The lectures are illustrated by means of the lantern and microscope. A large part of the course is devoted to a consideration of the official organic drugs.

Senior Course.

The lectures are mainly upon the active principles, adulterants, official preparations, therapeutic uses, and doses; after which the organic and inorganic poisons are taken up under three heads: 1st, Corrosive; 2d, Irritant; and 3d, Neurotic Poisons. Under these three divisions are explained briefly their action, detection, and antidote.

PHARMACY.

Freshman Course.

This course is given to the study of the various pharmaceutical processes and operations. Following in the order named are lectures on meteorology, heat, thermometry, evaporation, distillation, fusion, sublimation, calcination, granulation, comminution, solution, filtration, clarification, decoloration, precipitation, crystallization, and extraction, during which the various methods used to bring about the desired results will be illustrated.

Junior Course.

During a part of this course the time is given to the application of the processes considered during the Freshman year to pharmacopœial preparations, and such modifications as adapt them to special uses.

The latter part of this course is taken up with the study of official preparations obtained from the elementary bodies beginning with bromine, chlorine, iodine, phosphorus, and sulphur, following by carbon,

boron, silicon, the inorganic acids, potassium, sodium, lithium, ammonium, magnesium, calcium, barlum, zinc, aluminum, cerium, cadmium, manganese, iron, chronium, lead, silver, copper, mercury; antimony, arsenic, bismuth, and gold.

Senior Course.

The time during this course is mainly given to the study of compounds chiefly derived from organic matter, and products obtained therefrom, amylaceous and saccharine substances; glucosides and alkaloids, volatile oils and animal products used in pharmacy, vegetable oils, soaps, and products from resins.

ANALYTICAL CHEMISTRY.

The instruction in this Department is intended to present the chemical tests of the United States Pharmacopœia, with methods for the identification of substances and for the detection of impurities; to instruct in the methods of assaying and the use of volumetric solutions, and to enable students to analyze any ordinary mixture of inorganic material.

For the purpose of carrying out the work of this Department a large, well-equipped laboratory is provided with all the usual water and gas facilities, and has recently been wired and installed with electric apparatus whereby electro-chemical methods of analysis can be taught and the application of the electric current to the preparation of chemicals by the methods of electro-chemistry can be illustrated before the students. These and other facilities afford students exceptional opportunities to become familiar with the fundamental principles of the science of chemistry.

The first year is devoted to experimental work so arranged as to supplement the lectures in General Chemistry.

The second year covers a systematic course in qualitative analysis in connection with the test of the United States Pharmacopœia.

The third year is devoted to volumetric analysis by means of the standard solutions of the Pharmacopœia.

GENERAL CHEMISTRY AND PHYSICS.

Inasmuch as the subjects of Analytical Chemistry and Pharmacy are fully provided for in other courses, these lectures are devoted more closely to the fundamental principles and classification which must underlie a thorough and systematic knowledge of Chemistry. Owing to the intimate connection existing between Chemistry and several branches of Physics, a number of lectures illustrating the more important laws and principles of some of these branches precedes the

regular course in Chemistry, and others on these subjects with which a prior acquaintance is less important follow after the student has acquired some knowledge of chemical changes. During the first half of the second year Physics and the non-metallic elements receive consideration, followed during the remainder of the second and a portion of the third year by the metals. The greater portion of the third year is devoted to the exposition of the more important facts, principles, and theories of Organic Chemistry.

MICROSCOPY.

The course of Microscopy gives instruction in the use of the compound microscope as an aid in the study and identification of drugs, and requires full attendance from Junior and Senior students.

The work includes both lectures and laboratory courses, and consists in the examination of plant tissue as illustrated in various vegetable substances most familiar to pharmacists. Special attention is given to the structural characteristics by which one drug can be distinguished from another as well as to the detection and identification of the most common adulterants used.

MERCANTILE PHARMACY AND PHARMACEUTICAL JURISPRUDENCE.

These courses are required in the Senior class only.

FEES.

Matriculation	$5
Tickets for the full year's course of instruction, Freshman	80
Tickets for the full year's course of instruction, Junior	85
Tickets for the full year's course of instruction, Senior	90
Single tickets for Chemistry, Materia Medica, Botany, and Toxicology, each	20
Single tickets for Analytical Chemistry	25
Single tickets for Practical Pharmacy	25
Single tickets for Microscopy	20
Single tickets for Mercantile Pharmacy	10
Single tickets for Pharmaceutical Jurisprudence	10
Fee for Diploma	10

For further information consult the Dean, HENRY E. KALUSOWSKI, 808 I Street N. W.

COLLEGE OF VETERINARY MEDICINE

BOARD OF TRUSTEES.

J. A. T. Hull. David Eastburn Buckingham, V.M.D.
H. Rozier Dulany. John Lockwood, V.S.
William Corcoran Eustis. John Pollard Turner, V.M.D.

FACULTY.

Charles Herbert Stockton, LL.D....President of the University
David Eastburn Buckingham, V.M.D.....Dean, Professor of Materia Medica, Therapeutics, and Canine Practice
Charles Edward Munroe, Ph.D., LL.D.....Professor of Chemistry
Shepherd Ivory Franz, Ph.D.....Professor of Physiology
John Lockwood, D.V.S.....Professor of Veterinary Surgery
John Pollard Turner, V.M.D....Professor of Theory and Practice of Veterinary Medicine
Frederick Fuller Russell, M.D., Major U. S. Army, Director Army Medical School, Professor of Bacteriology and Pathology
Thomas Malcolm Price, M.S., Ph.D.....Professor of Physiological Chemistry
Harry Webster Graybill, B.Sc., M.A., D.V.M...Professor of Zoology and Parasitology
Hulbert Young, V.M.D..Assistant Professor of Veterinary Obstetrics and Lecturer on Horseshoeing
John M. Buck.....Assistant Professor of Veterinary Anatomy
Otis Dow Swett, S.M., LL.M.....Assistant Professor of Chemistry
Jacob Traum, D.V.M....Assistant Professor of Special Pathology and Infectious Diseases
William W. Bride, A. B., LL.B..Lecturer on Veterinary Jurisprudence
Louis B. Castell, Phar.D....Lecturer on Botany and Demonstrator in Veterinary Materia Medica and Pharmacy
Ralph J. Carr, B.Sc.....Lecturer on Feeds and Feeding
Herbert S. Williams, V.M.D.....Clinical Instructor in Military Veterinary Science
Elijah White Titus, M.D.....Instructor in Hipology and Eruhyology
Tunis Hicks, V.M.D.....Instructor in Veterinary Anatomy
Chauncey Merle Grubb, D.V.M.....Lecturer on Animal Research and Surgery
Ira S. Pope, V.M.D.....Lecturer on Veterinary Dentistry and Lameness

WILLIAM HENRY O'HARA, D.V.M.....Instructor in Veterinary Medicine
————.....Lecturer on Zootechnics, Dairy Inspection, and Milk Hygiene
EDWIN HENRY INGERSOLL, S.B Assistant in Physiological Chemistry
HARRY A. LOCHBOEHLER, D.V.M.
Assistant in Veterinary Materia Medica and Therapeutics

REQUIREMENTS FOR ADMISSION.

Students presenting a diploma from any recognized college, normal or high school are eligible to admission without examination.

Students not having the above qualifications will be required to pass an examination equivalent thereto, credits being allowed for any subject or subjects on presentation of sufficient evidence.

ADMISSION OF STUDENTS FROM OTHER SCHOOLS.

Students of other recognized and approved veterinary schools may be admitted to this school as follows:

Those qualified to enter the second year of such a school may be admitted to the second-year class of this school, those qualified to enter the third year of their own school to the third year of this school; provided, however, that the subjects pursued by the applicants in their previous year or years are reasonably equivalent to those required in the same year or years in this school, and that the requirements for advancement from class to class are the equivalent of those in this school. Applicants may be required to submit to examination in all the subjects pursued by the previous class of this school.

EVIDENCE OF ATTENDANCE.

At the end of the college year each student is entitled to and shall receive a written statement giving the length of time spent in each study during the session and the grade received therein. This statement, or definite evidence of credit, shall be exacted from a student before he is given advanced standing in any veterinary college. (U. S. B. A. I. Cir. 150.)

ADVANCED STANDING.

Advanced standing will be given for degrees in Medicine, Dentistry, Veterinary Medicine, or Pharmacy.

Students holding degrees in Arts, Science, Philosophy, or Agriculture, who in the course of study for their degrees have pursued studies in chemistry, physiology, anatomy, histology, bacteriology, or pathology,

equivalent to the courses in these subjects in this college, may upon satisfactory evidence of their proficiency be credited with such studies; provided, however, that such students shall devote two years' study in veterinary medicine, the last year of which is passed in this College.

SPECIAL STUDENTS.

Students, approved by the Dean, not candidates for the degree of Doctor of Veterinary Medicine, may be admitted without examination to pursue any course they may elect. Such courses cannot, however, be subsequently considered as time spent in the course for the degree of Doctor of Veterinary Medicine. Nor can such students enter upon the regular veterinary course without complying with all the regular requirements for admission.

CLASSIFICATION OF STUDENTS.

Students are divided into four classes, according to their proficiency and the time spent, viz., first, second, third, or fourth year. Students cannot advance to a higher class with more than one major and one minor condition. Students failing in any subject or subjects may be permitted at the next examination period a reexamination in the subjects in which they fail. The Faculty may dismiss any student from the College, if in its judgment such student be deemed an unsuitable person, intellectually or otherwise, for the profession of veterinary medicine.

ORDER OF INSTRUCTION.

The subjects studied in each year are shown in the following table:

First Year.	Second Year.	Third and Fourth Year.
Anatomy.	Bacteriology.	Practice.
Histology.	Pathology.	Surgery.
General Chemistry.	Physiology.	Obstetrics.
Materia Medica.	Surgery.	Therapeutics.
Horseshoeing.	Practice.	Meat Hygiene.
Botany.	Clinics.	Veterinary Jurisprudence.
	Bio-Chemistry.	Clinics.
	Pharmacy.	Parasitology.
	Anatomy.	Milk Hygiene.
		Zootechnics.
		Zoology.
		Control of Infectious Diseases.
		Canine Practice.

For lecture, laboratory and dissecting hours a schedule card is furnished.

Examinations are held at the end of each course. Clinical work in the veterinary and canine hospitals connected with the College and at abattoirs and stock and dairy farms is required of third and fourth year students.

ANATOMY.

JOHN M. BUCK, D.V.M.....Assistant Professor
TUNIS HICKS, D.V.M.....Instructor

The instruction in Anatomy is given in a series of lectures, demonstrations, recitations, and laboratory work, the latter being the most important.

The lectures are intended to present the general anatomical features of the horse and other domestic animals, and to point out the anatomical relations of the organs and parts of the body most subject to surgical operations.

The horse is used as the type subject in dissection, and every student is required to dissect all the parts of the horse, and such other of the domesticated animals, including the ox, sheep, swine, dog, and cat, as may prove most expedient.

The laboratory is well supplied with all of the parts of the skeleton of the horse, and portions of the skeleton of various other domestic animals, for the work in osteology. Ample material is always available for the dissection of joints, muscles, viscera, and the vascular and nervous systems. The laboratory is also provided with a complete model of the horse, showing the relation of all the organs and parts of the body, for demonstrations in general and surgical anatomy. The course is completed in the second year.

TEXT-BOOKS Sisson, Veterinary Anatomy.

HISTOLOGY AND EMBRYOLOGY.

ELIJAH WHITE TITUS, M.D.....Instructor

These subjects are taught by a series of carefully correlated lectures, recitations, quizzes, and demonstrations, and will include such instruction in microscopy as a working knowledge of the use of the simple and compound microscope and accessories, supplemented by the fundamental laws of optics; the method of preparing tissues for microscopic examination, and the technique of mounting.

Comparative histology will deal with the minute structure of the tissues and organs of various animals, including man. In addition to

the microscopical demonstrations, lantern demonstrations will also be given.

Embryology under this head will present the salient features of the anatomy and physiology of the fecundated ovule up to the time of birth.

TEXT-BOOK: Histology, Bohm, Davidoff & Huber.

PHYSIOLOGY.

HULBERT YOUNG, V.M.D.....Assistant Professor
SHEPHERD IVORY FRANZ, Ph.D.....Lecturer

The course in Physiology consists of lectures, demonstrations, and laboratory exercises. The lectures cover all the important facts and theories regarding bodily functions of the animal, and are illustrated by diagrams, models, and prepared specimens.

In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of nerves and muscles, and on the special senses of animals.

Special emphasis is laid on the relation of normal physiological functions to the disturbances of function in disease and upon the physiological action of drugs.

It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with the succeeding course in Pathology, Therapeutics, and General Veterinary Medicine.

TEXT-BOOKS: Howell's Physiology, Smith's Veterinary Physiology.

GENERAL CHEMISTRY.

(First Year.)

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor
OTIS DOW SWETT. S.M.....Assistant Professor

GENERAL CHEMISTRY.—A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical Chemistry. The student is required to take notes on these lectures, which he must submit for examination. *Tuesdays, Thursdays,* and *Saturdays,* at 4.50. Professor MUNROE and Mr. SWETT.

LABORATORY PRACTICE.—A laboratory course for the study of the principles of chemistry which is designed to instruct students in the methods of conducting chemical experiments. Professor PRICE.

TEXT-BOOKS: Holland's Medical Chemistry and Toxicology.

PHYSIOLOGICAL CHEMISTRY.

(Second Year.)

THOMAS MALCOLM PRICE, M.S., Ph.D.....Professor
E. H. INGERSOLL.....Assistant

This course will consist of lectures and laboratory instruction, and includes the study of water from a sanitary standpoint; the chemical examination of milk, the tissues and fluids of the body; the isolation of the digestive enzymes, and a study of their action in vitro.

MATERIA MEDICA AND THERAPEUTICS.

DAVID EASTBURN BUCKINGHAM, V.M.D.....Professor
LOUIS B. CASTELL, Phar.D., M.D.....Lecturer
HARRY A. LOCHBOEHLER, D.V.M.....Demonstrator

First year. (1) Lectures upon and demonstrations of drugs and their preparations and doses used in veterinary practice will be followed by recitations to assist in memorizing. (2) Practical exercises will be given in prescription writing, also a short course in Veterinary Pharmacology.

Third year. (1) Systematic lectures upon the physiological action of drugs and their effects in disease, their therapeutic uses, and their methods of administration to animals. (2) Prescription writing, in which students are given hypothetical cases for which to prescribe. (3) The therapeutic application of various agencies not drugs.

TEXT-BOOK: Winslow's Veterinary Materia Medica and Therapeutics.

PRACTICE OF VETERINARY MEDICINE.

JOHN POLLARD TURNER, V.M.D.....Professor
WILLIAM HENRY O'HARA, D.V.M.....Instructor

This subject is taught by a series of lectures, recitations, quizzes, and clinics extending over a period of two years.

The student is personally drilled in all the various diseases and doctrines taught in a well regulated veterinary school.

Especial attention is given to practical work whereby the student can become proficient in the diagnosis and treatment of disease.

Visits are required to the three veterinary hospitals in connection with the University, and personal attention is given students in visits to various large stables in and adjacent to the city of Washington, where practical instruction is given the third and fourth year classes in physical diagnosis among horses, cows, and hogs.

Equal attention is given diseases of cattle as of horses, whereby the student is properly fitted for either city or country practice.

Diseases of food-producing animals will be thoroughly explained.

TEXT-BOOKS: Friedberger and Froehner's Pathology and Therapeutics of Domestic Animals; Robertson's Practice of Equine Medicine; Williams' Principles and Practice of Veterinary Medicine; Fleming's Manual of Veterinary Sanitary Science and Police; Glass' translation of Muller's Diseases of the Dog.

VETERINARY SURGERY.

JOHN LOCKWOOD, V.S.....Professor
CHAUNCEY MERLE GRUBB.....Instructor

The instruction given in this course embraces systematic lectures upon the principles and practice of Veterinary Surgery.

The different surgical operations are illustrated in clinic and upon the cadavar and the uses of all the important surgical instruments and appliances are demonstrated in the same manner. The use of anæsthetics, the practice of dental surgery, and castration on all domestic animals will receive special attention.

TEXT-BOOKS: Moeller's Operative Veterinary Surgery; Fleming's Operative Veterinary Surgery; Hobday's Canine and Feline Surgery; Williams' Principles and Practice of Veterinary Surgery; Pfeiffer and Williams' Surgical Operations; White's Restraint of Domestic Animals.

BACTERIOLOGY AND PATHOLOGY.

FREDERICK FULLER RUSSELL, M.D.....Professor

(Curator Army Medical Museum.)

BACTERIOLOGY.—This subject comprises laboratory instruction in the fundamental principles and methods of pure bacteriology. Thorough drilling is given in the preparation of culture media, in disinfection, sterilization, staining, and the general methods of bacterial differentiation. Following this course, which is given daily during October, the further study of bacteria is taken up in connection with and as applied to pathology.

Pathology comprises the laboratory study of the general and special phenomena of inflammation, and a detailed study of the pathological processes found in the various diseases. The relation of bacterial and other microphytic life to disease processes and results is studied coincidentally and constitutes a course in applied bacteriology. In connection with the laboratory work a course of lectures and demonstrations is given upon immunity, serum therapy, and protective inoculation.

Surgical Pathology.—A special course in the healing of wounds and injuries and in the pathology of surgical operations is given in the third year.

Clinical Microscopy.—Comprising the study of the various tissues, fluids, ejecta, and dejecta, with a view to diagnosis of diseased conditions, is given in the first part of the third year.

Text-books: Delafield and Prudean's Pathology, Hiss & Zinsser's Text-book on Bacteriology.

SPECIAL PATHOLOGY AND INFECTIOUS DISEASES.

Jacob Traum, D.V.M.....Assistant Professor

The lectures in this course will be given with reference to the etiology, pathogenesis, symptoms, diagnosis, treatment, and prevention of the infectious diseases. Local and national regulations and measures governing the control and eradication of diseases will be clearly explained, with particular reference to the work of the United States Government in the eradication of infectious diseases.

INSPECTION AND POST MORTEM EXAMINATIONS.

Jacob Traum, D.V.M.....Assistant Professor

The subject involves the control of food animals destined for slaughter; their ante-mortem and post-mortem inspection with reference to the diseases which affect the wholesomeness of the meat. Further, the preparation of meat-food products, the various forms of preservation of meat and the conditions to which the meat and meat products are subject from the different infections and contaminations. The application of the Regulations of the Department of Agriculture in connection with the judgment of carcasses, meats, and meat-food products.

Practical demonstrations in meat inspection and judgment will be given at the local abattoirs.

Text-book: Mohler and Eichhorn's translation of Edelmann's Meat Hygiene.

Text-books: Moore's The Pathology of Infectious Diseases of Animals; Friedberger and Froehner's Pathology and Therapeutics of Domestic Animals; Meat Inspection; Edelmann's; Mohler and Eichhorn translation.

ZOOTECHNICS AND MILK HYGIENE.

————————, ...Lecturer

The course covers the chief phases of live-stock work, including

the judging, breeding, feeding, and management of horses, cattle, sheep, and swine.

It is introduced by discussions upon the origin of animal life, natural selections, the origin of breeds, and the domestication of animals.

The principles of breeding, heredity, environment, selection, individual conformation, the history and development of breeds, principles of animal nutrition, balanced rations, practical feeding, and the economic production of beef, milk, mutton, and pork are given consideration.

Students obtain practical experience in the judging of the various breeds and classes of animals by visits to neighboring farms.

The course in Milk Hygiene will be given by lectures and demonstrations throughout the third year. The students will be taught the theory of milk secretion, the composition and characteristics of milk, the various methods of testing, together with the chemistry and bacteriology of milk, abnormal forms of milk, and diseases transmissible through milk to bovines and humans, with a study of the epidemics produced. Sanitary stabling and the sanitary handling of milk will be considered, showing the construction of various types of dairy barns and dairy houses, the manner of milking, care of the milk, and the varieties and care of dairy utensils; also a study of sterilization and pasteurization.

TEXT-BOOKS: Plumb's Types and Breeds of Farm Animals; Pearson's translation of Jensen's Essentials of Milk Hygiene; Henry's Feeds and Feeding.

VETERINARY ZOOLOGY AND PARASITOLOGY.

HARRY WEBSTER GRAYBILL, M.S., B.A., D.V.M.....Professor

This course will embrace Zoology and the various parasites with which the various domestic animals are infested. Instruction as to prevention, eradication, and the treatment of the diseases caused by them will be given.

TEXT-BOOK: Neuman, Animal Parasites.

VETERINARY OBSTETRICS.

HULBERT YOUNG, V.M.D.....Assistant Professor

The course of instruction will consist of lectures on obstetrical anatomy, fœtal development, presentations, and the diseases incidental to the periods of gestation and parturition.

The lectures will be illustrated by diagrams, models, natural preparations, and other appliances for demonstrating the principles taught.

TEXT-BOOK: Fleming, Dalrymple.

HORSESHOEING.

HULBERT YOUNG, V.M.D.....Lecturer

The course is intended to familiarize students with the principles of shoeing, the examination of the feet and proper use of special shoes for relief of defects or disease.

TEXT-BOOK: Lungwitz on Horseshoeing, Adams' translation.

MILITARY PRACTICE.

HERBERT S. WILLIAMS, V.M.D.,
Clinical Instructor in Veterinary Military Practice
(U. S. Army, Fort Meyer, Va.)

This course consists of lectures and demonstrations on purely military veterinary subjects, and is given at Fort Meyer, Va., the cavalry and artillery post near Washington, D. C.

The subjects of saddling, bitting, and draft, together with the study of the proper conformation of animals used for military purposes, are included in this set of lectures.

The control of contagious diseases in army animals is also given special consideration.

VETERINARY JURISPRUDENCE.

WILLIAM W. BRIDE, A.B., LL.B.....Lecturer

A series of lectures upon the Law of Animals, including suggestions relating to the conduct of veterinarians as experts in the trial of cases involving the above law.

In addition to the foregoing courses of lectures, a number of Government experts have been engaged to give lectures on subjects of special interest to the veterinarian.

EXAMINATIONS AND DEGREE.

Examinations are held at the end of the course in each subject. Students failing in examinations will be permitted to be reexamined at the next regular examination period. Students will not be admitted to examination unless they have paid all fees due at the time or present a permit signed by the Dean. In order to avail themselves of the privilege of reexamination, students must file their written applications with the Dean not later than fifteen days before the date set for the examinations.

Proficiency is marked upon a scale of 100. A grade of 65 is required to pass an examination.

If a satisfactory examination is passed, the student receives the Degree of Doctor of Veterinary Medicine (D.V.M.).

THE VETERINARY LIBRARY.

This library is located in the Administration Building of the College of Veterinary Medicine, and is open from 8 a. m. to 10 p. m.

It contains, in addition to volumes on veterinary medical subjects, the current veterinary journals.

Provision is made in the annual library fee charged every student to add to it as published the important new works on veterinary medicine.

OTHER LIBRARIES.

Washington contains the Library of the Surgeon General's Office of the United States Army, the most complete medical library in the world. This library, as all other libraries of the Government, is open to the public between the hours of 9 a. m. and 4.30 p. m. There is also the Library of Congress and the many excellent libraries of the various other Government offices, in addition to the University Medical Library.

FEES AND CONTINGENT EXPENSES.

1. Matriculation fee (payable only on first entry into the University)	$5
2. Library fee per annum	3
3. Tuition fee per annum	100
4. Fee for graduation	10

A deposit of $5 per annum is required of every student to cover loss, breakage, or damage to the property of the school. The amount of such deposit paid in excess of the breakage will be returned.

No change wil be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter-session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Secretary, and will be received at the end of a quarter session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use..... $5
Microscope for Bacteriological, Pathological, and Clinical Microscopy Laboratory use..... 6

PAYMENT OF FEES.

All fees are to be paid to the clerk. Tuition fees are payable quarterly, in advance. Matriculation, library, and laboratory fees are payable in full, in advance.

For further information apply to

DAVID E. BUCKINGHAM, *Dean,*
The George Washington University,
College of Veterinary Medicine,
Washington, D. C.

Nos. 2113-2115 Fourteenth St. N. W.

PART IV

STUDENTS IN THE UNIVERSITY DEGREES CONFERRED, MISCELLANEA

STUDENTS REGISTERED IN THE UNIVERSITY. 1911-1912.

DEPARTMENT OF ARTS AND SCIENCES

SCHOOL OF GRADUATE STUDIES.

In Attendance.

Name.	Legal residence.	City address.
Bays, William Webb	D. C.	1343 Clifton Street.
Topic—Economics.		
Deviny, Michael Ambrose	D. C.	704 14th Street, N. E.
B. S., 1910, St. John's College (D. C.)		
Topics—Chemistry, Mathematics, Physics.		
Meyer, Will Beck	D. C.	609 P Street.
B.S. in Chemistry, 1910, The George Washington University.		
Topic—Bacteriology		
Starbecker, Moses	N. Y.	1104 5th Street.
B.S.,1910, College of the City of New York.		
Topic—Chemistry		
Welsh, Luther	Mo.	Army and Navy Club.
Graduate, 1909, United States Naval Academy.		
Topics—Chemistry, Physics.		
Wilkinson, Theodore Stark Jr.	D. C.	2000 R Street.
Graduate, 1909, United States Naval Academy.		
Topics—Chemistry, Mathematics, Physics.		

Civil Engineer.

Ball, William Curtis Cooley	Md.	824 6th Street, S. W.
Dougherty, Howard Francis	Md.	824 13th Street.
Moore, Lacy	N. C.	1502 Vermont Avenue.
B.S., 1906, College of Agriculture and Mechanic Arts, N. C.		
Veihmeyer, Frank	D. C.	1518 S Street.

Electrical Engineer.

Munroe, Russell Barker	D. C.	2115 S Street.
B.S., 1911, University of Pennsylvania.		
Wiegand, Henry Frank	D. C.	824 6th Street S. W.
B.S. in E.E., 1911, The George Washington University.		

Mechanical Engineer.

Name.	Legal residence.	City address.
Carty, Roy Franklin	D. C.	1234 Harvard Street.
B.S. in M.E., 1911, The George Washington University.		
Miller, Elton Willard	Cal.	1438 Meridian Place.
B.S. in M. E., 1908, The George Washington University.		

Master of Science.

Castleman, Philip	Mass.	1232 14th Street.
B.S., 1906, Harvard University.		
M.D., 1911, The George Washington University.		
Topics—Major, Chemistry; Minors, Preventive Medicine, Neurology.		
Finkelstein, Rueben	D. C.	616 M Street.
A.B., 1911, The George Washington University.		
Topics—Major, Applied Mathematics; Minors, Physics, Education.		
Ingersoll, Edwin Henry	D. C.	Bu. A. I., Dept. of Agr.
B.S., 1911, The George Washington University.		
Topics—Major, Chemistry. Minors, Chemistry, Bacteriology.		
McLeran, John David	D. C.	401 M Street, N. E.
B.A., 1896, The Iuka Normal Institute.		
M.A., 1903, Southern Normal University.		
Topics—Major, Chemistry; Minors, English, History.		
Marsh, Allen Johnson	D. C.	628 E Street, N. E.
B.S., 1910, The George Washington University.		
Topics—Major, Chemistry; Minors, Bacteriology, Geology.		
Miller, Harry McClure	Ky.	25th and E Streets.
Topics—Major, Chemistry; Minors, Bacteriology, Zoology.		
Norton, Raymond Pratt	Maine	1311 K Street.
B.S., 1910, University of Maine.		
Topics—Major. Chemistry. Minors, Chemistry, Bacteriology.		
Schmied, James William	Ohio.	943 O Street.
B.S., 1910. Ohio Northern University.		
Topics—Major, Chemistry, Minors, Chemistry, Mathematics.		
Valaer, Peter, Jr.	N. C.	421 P Street.
B.S.. 1906, College of Agriculture and Mechanic Arts, N. C.		
Topics—Major, Chemistry; Minors, Bacteriology, Miscroscopy.		

Master of Arts.

Barnes, Charles Maurice	Va.	Census Bureau.
A.B.. 1910. The George Washington University.		
Topics—Major, Economics; Minors, Sociology, History.		
Bevard, Katherine Harper	D. C.	1423 R Street.
A.B., 1911, The George Washington University.		
Topics—Major, Education; Minors, Education, History.		
Bradshaw, May Paul	D. C.	901 C Street, N. E.
A.B., 1909, The George Washington University.		
Topics—Major, History; Minors, English, Economics.		
Hancock, Walter Edgar	Texas	Takoma Park, D. C.
Topics—Major, History; Minors History, English.		

Name. Legal residence. City address.

Haycock, Robert Lee.....D. C.....2525 Wisconsin Avenue.
A.B., 1911, The George Washington University.
Topics—Major, Education; Minors, History, Sociology.

Judd, Neil Merton.....Utah.....New National Museum.
A.B., 1911, University of Utah.
Topics—Major, Classical Archaeology; Minors, American Archaeology, Geology.

Lampson, Lawrence Vincent.....Ohio.....1336 Otis Place.
A.B., 1906, Oberlin College.
Topics—Major, Political Science; Minors, English, Education.

Lowe, Edith Blinston.....D. C.....2622 Woodley Place.
A.B., 1911, The George Washington University.
Topics—Major, English; Minors, History, German.

Magnusson, Leifur.....Minn.....118 3rd Street, N. E.
A.B., 1905, University of Minnesota.
Topics—Major, Economics; Minors, Sociology, History.

Maréchal, Greer McInnis.....Ala.....War Department.
A.B., 1908 University of Alabama.
Topics—Major, Chemistry; Minors, Physics, French.

Maret, Jeanne.....France.....1225 L Street.
A.B., 1910, The George Washington University.
Topics—Major, French; Minors, German, English.

Pyles, Henry Miloon.....W. Va.....The Adrmore.
B.S., 1911, Dixon College.
Topics—Major, Education; Minors, Philosophy, History.

Rankin, John Owen.....D. C.....1736 G Street.
A.B., 1904, Tarkio College.
Topics—Major, Economics; Minors, Political Science, International Law and Diplomacy.

Rizer, Ruth.....D. C.....2568 University Place.
A. B., 1907, University of Michigan.
Topics—Major, History; Minors, English, French.

Schwartz, Claus Johann.....Germany....3526 11th Street.
A.B., 1908, The George Washington University.
Topics—Major, German; Minors, French, Education.

Scott, Mabel Lavinia.....D. C.....1455 Girard Street.
A.B., 1907, The George Washington University.
Topics—Major, English; Minors, German, History.

Walker, Bertha Florine.....D. C.....420 B Street, N. E.
A.B., 1911, The George Washington University.
Topics—Major, English; Minors, History, Zoology.

Wheeler, Harold Leslie.....Mass.....1824 California Street.
A.B., 1910, Brown University.
Topics—Major, English; Minors, French History.

Doctor of Philosophy.

Name. Legal residence. City address.

*Alden, Levi Russell.....D. C.....809 L Street.
A.B., 1903, A.M., 1904, The George Washington University.
LL.B., 1906, The George Washington University.
Topics—Major, History; Minors, Law, History.

Bates, Carleton.....Mass.....1628 Columbia Road.
B.S., 1908, Massachusetts Agricultural College.
B.S., 1908, Boston University.
Topics—Major, Bacteriology; Minors, Chemistry, German.

Broomell, Arthur Williams.....Md.....Bu. of Chem.,Dept. of Ag.
A.B., 1906, Swarthmore College.
Topics—Major, Chemistry; Minors, Chemistry, Microscopy.

Buhrer, James D.....D. C.....1722 13th Street.
A.B., 1889, Calvin College.
B.D., 1892, Heidelberg Theological Seminary.
Topics—Major, Psychology; Minors, Philosophy, Sociology.

Cook, John.....N. J.....Y. M. C. A.
M.E., 1911, Stevens Institute of Technology.
Topics—Chemistry; Minors, Physics, Electrical Engineering.

Custis, Horace Hatch.....D. C.....The Iroquois.
A.B., 1906, Johns Hopkins University.
A.M., 1908, The George Washington University.
Topics—Majors, Chemistry; Minors, Chemistry, Bacteriology.

Devitt, George Raywood.....D. C.....2329 N Street.
B.A.,1882, University of New Brunswick, Canada.
Topics—Major, Education; Minors, Education, Psychology.

Donk, Marion Gilbert.....Fla.....The Brunswick.
A.B., 1898, Florida Agricultural and Mechanical College.
A.B., 1901, Harvard University.
B.S. in C.E., 1910, The George Washington University.
Topics—Major, Chemistry; Minors, Mechanical Engineering, Bacteriology.

Doyle, Aida Mary.....Pa.....1359 Park Road.
B.S., 1908, The George Washington University.
Topics—Major, Chemistry; Minors, Chemistry, Microscopy.

Feigenbaum, William Morris....N. Y.....520 E Street, N. E.
A.B., 1907, A.M., 1908, Columbia University.
Topics—Major, History; Minors, History, Sociology.

Hall, Maurice Crowther.....D. C.....Bu. A. I., Agr. Dept.
B.S., 1905, Colorado College.
M.A., 1906, University of Nebraska.
Topics—Major, Zoology; Minors, Zoology, Pathology.

*Thesis requirement not completed.

Name. Legal residence. City address.

Huddle, John Thomas.....D. C.....738 11th Street.
A.B.,1891, A.M., 1896. Roanoke College.
Topics—Major, Philosophy; Minors, Psychology, English.

Hyde, William Albert.....Conn.....2814 13th Street.
Ph.B., 1901, Yale University.
Topics—Major, Physics; Minors, Mathematics, Chemistry.
B.A., 1904, Milton College.

Jackson Hartley Harrad Thompson D. C... ... 1326 Euclid Street.
A.M., 1909, University of Wisconsin.
Topics—Major, Zoology; Minors, Zoology, Psychology.

Jenks, Clayton Louis.....D. C.....3020 Macomb Street.
A.B., 1906, M.S., 1909, Hamilton College.
Topics—Major, Chemistry; Minors, Physics, Electrical Engineering.

Kibler, Alton Lewin.....Va.....1715 35th Street.
A.B., 1904, Randolph Macon College.
M.S., 1909, The George Washington University.
Topics—Major, Chemistry; Minors, Chemistry, Bacteriology.

Kibler, Thomas Latimer.....Va.....1715 35th Street.
A.B., 1904, Randolph Macon College.
M.A., 1908, The George Washington University.
Topics—Major, Economics; Minors, History, Sociology.

Lane, Charles Homer.....Md.....Dept. of Agriculture.
B.A., 1903, A.M., 1905, Mount Allison University.
B.A., 1904, Harvard University.
B.S.A., 1909, University of Tennessee.
Topics—Major, Education; Minors, Education, Philosophy.

Lathrop, Elbert Clyde.....Mich....Bureau of Soils, Dept. of Agriculture
A.B., 1907, DePauw University.
Topics—Major, Chemistry; Minors, Bacteriology, Geology.

*McCaughey, William John.....Pa.....Ohio State University.
B.S., 1906, University of Pennsylvania.
Topics—Major, Mineralogy; Minors, Geology, Chemistry.

*Marshall, Elmer Eugene.....D. C.....1630 Caroline Street, Baltimore, Md.
A.B., 1889, Ohio Wesleyan University.
S.T.B., 1894, Boston University
Topics—Major, History; Minors, Philosophy, Semitics.

Morehouse, Alanson David.....D. C.....1526 O Street.
M.E., 1893, Cornell University.
Topics—Major, Engineering; Minors, Economics, Meteorology.

Morse, Elisha Wilson.....D. C.....1723 Willard Street.
B.A.S., 1897, Harvard University.
Topics—Major, Zoology, Minors; History, Economics.

*Thesis requirement not completed.

Name. Legal residence. City address.

Paine, Howard Sheperd.....Ohio.....1438 Meridian Place.
A.B., 1902, Ohio University.
Topics—Major, Chemistry; Minors, Chemistry, Physics.

Plass, Joseph.....Germany....225 H Street.
A.B., 1910, A.M., 1911, The George Washington University.
Topics—Major, History; Minors, History, German.

Roark, Ruric Creegan.....Ky.....Bureau of Chemistry.
P.A., 1907, University of Cincinnati.
M.A., 1908, University of Illinois.
Topics—Major, Chemistry; Minors, Bacteriology, Pharmacology.

Schwartz, Claus Johann.....Germany....3526 11th Street.
B.A., 1908, The George Washington University.
Topics—Major, German; Minors, French, Education.

*Smith, John William.....D. C.....417 Laurens Street, Baltimore, Md.
A.B., 1901, Randolph Macon College.
Topics—Major, Philosophy; Minors, History, Semitics.

Swett, Otis Dow.....Md.....Chevy Chase, Md.
LL.B., 1891, LL.M., 1892, B.S., 1904, Columbian University.
M.S,, 1909, The George Washington University.
Topics—Majors, Chemistry; Minors, Chemistry, Bacteriology.

Symons, Thomas Baddeby.....Md.....College Park, Md.
B.S., 1902, M.S., 1904, Maryland Agricultural College.
Topics—Major, Zoology; Minors, Zoology, Botany.

Thomas, James Shelby.....D. C.....Rm. 408 Southern Bldg.
A.B., 1900, A.M., 1903, Milliken College.
Topics—Major, Education; Minors, Political Science, History.

Townsend, Chas. Henry Tyler... D. C. Puira, Peru.
B.S., 1908, The George Washington University.
Topics—Major, Zoology; Minors, Geology, Botany.

Truesdell, Leon Edgar.....Vt.....1330 10th Street.
A.B., 1907, A.M., 1907, Brown University.
Topics—Major, Philosophy; Minors, Sociology, English.

*Young, J. Elektra Ludlow.....France.....Nat. Cathedral School.
B.A., 1906, Columbia University.
M.A., 1909, The George Washington University.
Topics—Major, Greek; Minors, Latin, Archaeology.

*Zerhusen, Francis Xavier.....Ky.....St. Joseph's College, Cincinnati, Ohio.
A.B., 1906, Notre Dame University.
Topics—Major, German; Minors, German, History.

Zimmer, Johanna.....Md.....Frederick, Md.
B.L., 1902. M.L., 1903, Syracuse University.
Topics—Major, Philosophy; Minors, German, English.

*Thesis requirement not completed.

THE COLLEGES.

The following list includes all undergraduate students. The registration is indicated by the abbreviations: A. & S., Columbian College; Eng., for College of Engineering and Mechanic Arts; C. P. S., for College of Political Sciences; T. C., for Teachers College. The letters c., e., m., and a., after the abbreviation Eng., indicate that the student is a candidate for the bachelor's degree in Civil, Electrical, or Mechanical Engineering, or in Architecture; the absence of these letters indicates a special student.

Name.	Legal residence.	City address.
Alden, Anna Grace, T.C	D. C.	809 L Street.
Allanson, Henry Emil, A.&S.	Iowa	601 Y. M. C. A.
Allen, Cornelia Morgan, T.C	D. C.	1627 Lamont Street.
Altizer, Posey John, C.P.S	Va.	941 H Street.
LL.B., 1907, The George Washington University.		
Altman, Stanley B., A.&S	D. C.	1826 G Street.
Anders, Walter Lesesne, A.&S	Texas	915 H Street.
Anderson, Hans Wilhelm Ferdinand, A.&S	Germany	1435 Massachusetts Ave.
Anderson, Henry Melville, A.&S	D. C.	3030 R Street.
Anderson, Vernon David, Eng.	Utah	1100 Vermont Avenue.
Anderton, Lynda Fairfax, T.C	Va.	East Falls Church, Va.
Applebaum, Aaron L., Eng	N. J.	1214 6th Street.
Appleby, Charline Elizabeth, A.&S	Ind.	1510 P Street.
Appleby, Wilmer Conrad, A.&S	D. C.	1510 P Street.
Argo, Reamer Wilkes, Eng.m	Md.	1306 O Street.
Armes, Jessie, A.&S	D. C.	1607 Irving Street.
Arnold, John Knox, C.P.S	Ky.	2532 14th Street.
A.B., 1911, M. Dip., 1911, The George Washington University.		
Arnold, Virginia Josephine, T.C	D. C.	1824 Newton Street.
Avers, Henry Godfrey, A.&S.	Ohio	8 Fourth Street, S. E.
Ayler, Ruth Leah, A.&S	D. C.	244 Fourth Street, S. E.
Bacon, Charles B., Eng	Minn	C/o Bu. of Chemistry.
Ball, William Curtis Cooley, Eng.c	Del.	824 6th Street, S. W.
Balloch, Agnes McGrew, A.&S	D. C.	1511 Rhode Island Ave.
Barb, Thomas Virgil, C.P.S	D. C.	701 Munsey Bldg.
Barber, Charles Wightman, Eng.c	D. C.	412 South Capitol Street.

Name.	Legal residence.	City address.
Bartholomew, Don Carlos, A.&S	Ohio	Vienna, Va.
Bashford, Margaret Josepha, T.C	Va	R. F. D. No. 2, Alexandria, Va.
Bast, Lucy Athelia, T.C	Mich	201 6th Street, N. E.
Baston, George Henry, A.&S	Maine	Bureau of Chemistry.
Batt, Joseph Harper, A.&S	Del	1433 L Street.
Bayly, Howard Paul, Eng.c	D. C.	1333 11th Street.
Bays, William Webb, C.P.S	N. C.	1343 Clifton Street.
A.B., 1904, Washington and Lee University.		
Beaman, Nelson Barry, C.P.S	Mich	1933 Calvert Street.
Beaton, Octavia S., A.&S	N. Y.	Hotel Hamilton.
Beauchamp, Edward Lassell, A.&S	D. C.	3500 U Street.
Beekly, Albert Leon, A.&S	Neb.	425 Y. M. C. A.
Beller, Elizabeth Caroline, T.C	D. C.	235 First Street, N. E.
Beneman, Harry Gustavus, A.&S	D. C.	904 Westminster Street.
Benton, Ralph Webster, A.&S	D. C.	462 O Street.
Berger, Carey Kingsbury, A.&S	Iowa	Y. M. C. A.
Berry, Louise, T.C	D. C.	1919 K Street.
Bingham, Miles Franklin, C.P.S	Ohio	The Cumberland.
Bisset, David A., A.&S	D. C.	3301 Lowell Street.
Bizzell, Carey, A.&S	D. C.	The Burlington.
Bizzell, James Eustace, A.&S	D. C.	The Burlington.
Black, James Earl, A.&S	N. Y.	1225 O Street.
Blackburn, Mary St.Clair, A.&S	D. C.	3313 17th Street.
Blackley, Robert Bassett, C.P.S	D. C.	1412 Mass. Avenue.
Blandford, Hannah McLean, T.C	Md	220 8th Street, S. W.
Bontz, Mary Ellen, T.C	Va	422 N. Alfred Street. Alexandria, Va.
Bortman, Isaac Maurice, A.&S	Pa	1476 Clifton Street.
Bouldin, Ellen Barksdale, T.C	Va	1321 M Street.
Boutell, Hugh Gates, Eng.m	Ill	1724 Lamont Street.
Boutell, Roger Sherman Gates	A.&S D. C.	1724 Lamont Street.
Bowen, Norris Loring, C.P.S	Va	Clarendon, Vo.
Bradburn, Adeline May, A.&S	D. C.	138 11th Street, S. E.
Bradfield, Elizabeth, A.&S	D. C.	Mt. St. Alban.
Brady, Johnson Camden, Eng	W. Va	2435 18th Street.
Brakhagen, Minnie Hulda, A.&S	D. C.	634 New York Avenue.

Name.	Legal residence.	City address.
Brame, Arthur Hervey, Eng.e...	D. C.....	1217 O Street.
Brand, Albert Arnold,Eng.e.....	Ind.....	2139 Pa. Avenue.
Breneman, Claude Royal, A.&S...	D. C.....	910 M Street.
Breuninger, Henry L., Eng.m...	D. C.....	3208 19th Street.
Brewer, Elim Gilmore, A.&S.....	D. C.....	608 Mass. Avenue.
Brigham, Gertrude R., A.&S.....	D. C.....	1119 17th Street.
Britton, Anna Louise, A.&S.....	N. H.....	634 Rock Creek Church Road.
Brock, Walter Burritt, A.&S.....	D. C.....	229 Mass. Avenue, N. E.
Brockwell, John F., A.&S.....	N. C.....	1259 Morse Street, N. E.
Brooke, Lloyd A., Eng.....	D. C.....	3524 10th Street.
Brown, Alvin McCreary, A.&S...	D. C.....	Kenilworth, D. C.
Brown, Mary, T.C.....	D. C.....	2464 Ontario Road.
Brown, Margaret Cabell, A.&S...	Brazil.....	1756 Q Street.
Browne, Gertrude Veronica, T.C	D. C.....	1121 Girard Street.
Buchanan, Omar Baily, Eng.e...	D. C.....	502 M Street.
Bull, Wilfrid Douglas, C.P.S....	Cal.....	1627 19th Street.
Bullion, Clarence L., Eng.....	Ohio.....	4434 Kansas Avenue.
Bullough, George Van Ness, A.&S	D. C.....	122 Tennessee Avenue.
Bundick, Clarence Albert, Eng.c...	D. C.....	716 12th Street, N. E.
Burchard, Edwin Day, Eng.c...	D. C.....	1113 S Street.
Burden, Katherine, A.&S.....	D. C.....	1237 Crittenden Street.
Burdette, Walter Washington, A.&S	Va.....	R. F. F. No. 4, Washington, D. C.
Burke, Ellen Teresa, A.&S.....	D. C.....	531 Jefferson Street, Brightwood Park, D. C.
Burnett, Lyle Black, A.&S.....	Mo.....	2224 F Street.
Burns, John C., A.&S.....	Pa.....	1129 New Hampshire Avenue.
Burritt, Alice, A.&S.....	D. C.....	The Cliffbourne.
Burrows, Tremaine K., C.P.S....	N. J.....	2323 Ontario Road.
Burt, Edwin Caleb, A.&S.....	D. C.....	1102 Vermont Avenue.
Bushnell, Paul, C.P.S.....	D. C.....	1757 Church Street.
Butler, Bessie M., A.&S.....	D. C.....	1467 Irving Street.
Cade, W. Roscoe, A.&S.....	Ohio.....	1820 15th Street.
Caemmerer, Johannes P., A.&S...	Wis.....	925 L Street.
Callahan, Morgan B., C.P.S.....	Md.....	1003 F Street.
Callister, Edward Richard, A.&S	Utah.....	53, Ventosa Apts.
Cam, Helen Elizabeth, T.C.....	Ill.....	58 T Street.
Campbell, Arthur B., Eng.c.....	Mo.....	24 Rhode Island Avenue, N. E.

Name.	Legal residence.	City address.
Campbell, Orland, A.&S.	D. C.	1343 Harvard Street.
Cannon, William Joseph, Eng.	N. Y.	1305 22nd Street.
Carpenter, Lillian Evans, T.C.	D. C.	205 D Street. N. E.
Carr, Kate Edna, T.C.	D. C.	1833 North Capitol St.
Carter, Francis Edward, A.&S.	Va.	Episcopal High Schoo.
Cash, Edith Katherine, A.&S.	D. C.	126 Tenn. Ave. N. E.
Chapin, Mabel Louise, A.&S.	D. C.	519 Stanton Place, N. E.
Chapman, John Holbrook, Eng.m	D. C.	3323 Wisconsin Avenue.
Chase, Harry Guy, Eng.e.	D. C.	320 Maryland Ave., N. E.
Cheek, Paul Tinsley, A.&S.	D. C.	2009 F Street.
Cheney, Edith, A.&S.	D. C.	816 Taylor Street.
Chiao, Su-ying, A.&S.	China	1302 Park Road.
Chowning, James William. Eng.	Mo.	1508 13th Street.
Chubb, Herman Blaney, C.P.S.	D. C.	No. 5, The Lenox.
Church, Grace Ella, A.&S.	D. C.	626 North Carolina Ave.
B.S., 1908, Beloit College.		
Cissel, John Floyd, C.P.S.	Md.	1843 Vernon Street.
Clark, Bennett Champ, A&S.	Mo.	1509 16th Street.
Clark, Howard, A.&S.	Ohio.	U. S. Geological Survey.
Clark, Marion, A.&S.	Md.	1321 N Street.
B.A., 1901, M.A., 1903, Western Maryland College.		
Claveloux, Frank, A.&S.	D. C.	2000 North Capitol St.
Cobb, Margaret V., T.C.	Va.	Falls Church, Va.
B.A., 1910, Radcliffe College.		
Cochrane, John Edward Walker, Eng.c.	Mass.	1414 K Street.
Cockrell, Selwyn Kennedy, A.&S	Md.	1050 W. Fayette St., Baltimore, Md.
Coe, Mayne R., A.&S.	D. C.	2947 Mills Ave., N. E., Langdon, D. C.
Cohen, George Grauman, C.P.S.	Ind.	211 C Street.
A.B., 1907, LL.B., 1907, University of Indiana.		
Cohen, Maurice, C.P.S.	D. C.	408 26th Street.
Cohen, Ralph, A.&S.	Russia	2016 1st Street.
Cole, Winthrop Ritchie, C.P.S.	Mass.	1916 Biltmore Street.
Collins, William Moore, A.&S.	D. C.	1417 G Street, N. E.
Connelly, Mary Ann, T.C.	D. C.	1438 S Street.
Connor, Daniel Allman, Eng.c.	D. C.	130 D Street, S. E.
Copeland, Leland Stanford, A.&S	Mo.	1114 Euclid Street.
Coppinger, Conor, C.P.S.	D. C.	820 18th Street.
Corbett, Ella Loretto, T.C.	D. C.	1411 Harvard Street.

Name.	Legal residence.	City address.
Corkran, Clarence H., A.&S.	Md.	Congress Heights, D. C.
Coulon, Eugene Enet, C.P.S.	La.	918 18th Street.
Coulson, Margaret Holmes, A.&S	D. C.	1657 31st Street.
Coumbe, Edward Celestine, A.&S	Wash.	1502 Vermont Avenue.
Council, Kinchen Kea, A.&S.	Ga.	1902 G Street.
Cox, Carrie, A.&S.	Ohio	312 Delaware Ave., N. E.
Crabtree, John H., C.P.S.	Okla.	Bu. of Corporations.
Crain, Newel Berryman, A.&S.	Texas	326 D Street, N. E.
Croswell, Frances Matilda, T.C.	D. C.	910 Virginia Ave., S. W.
Crowe, John Joseph, A.&S.	D. C.	Bureau of Standards.
Crown, James Edmund, Eng.m.	D. C.	727 5th Street, N. E.
Cullen, Stella Cecilia, T.C.	D. C.	1132 Columbia Road.
Dans, Jose P., Eng.C.	P. I.	The Ardmore.
Darcey, Maude Louisa, A.&S.	D. C.	1248 31st Street.
Davison, Ruth Low, T.C.	D. C.	1787 Columbia Road.
Decker, Cora E., A.&S.	D. C.	1316 30th Street.
Dagenhardt, George Albert, Eng.c	Pa.	911 23rd Street.
Degnan, George A., Eng.m.	Pa.	450 M Street.
Dempsey, Mary Veronica, A.&S	N. Y.	1716 M Street.
Denison, Harriet Alberta, A.&S	D. C.	929 P Street.
Deysher, Edgar F., A.&S.	N. J.	1416 A Street, N. E.
Dickey, Philena A., A.&S.	D. C.	912 P Street.
Dodge, Moncena Miles, A.&S.	Calif.	933 H Street.
Dollins, Hugh David, Eng.	D. C.	1222 11th Street.
Dolliver, Garrett Brown, A.&S.	S. D.	Y. M. C. A.
Donk, Peter J., A.&S.	D. C.	No. 37, The Brunswick.
Dougherty, Howard Francis, Eng.c	Md.	824 13th Street.
Douglass, Marguerite, A&S.	D. C.	323 Maryland Ave. N. E.
Dove, Beulah Augusta, T.C.	Md.	Rockville, Md.
Draper, Anne Elizabeth, A.&S.	N. Y.	1503 12th Street.
Dulin, William Shelton Gordon, Eng.c	D. C.	1420 Pa. Avenue.
Dunbar, Ralph McNeal, A.&S.	Md.	Y. M. C. A.
Dutton, Donald Langley, Eng.c.	D. C.	1306 O Street.
Dwyer, John Rochford, Eng.c.	D. C.	628 F Street, S. W.
Earl, Charles Merritt, A.&S.	Wis.	5th St., Congress H'ghts.

Name.	Legal residence.	City address.
Earll, Donald Montgomery, A.&S	Md.	Chevy Chase, Md.
Eatherly, Walter Scott, A.&S	Tenn.	910 19th Street.
Ebaugh, Ruth Mary, A.&S	Mo.	1343 Irving Street.
Eiker, Mattie, A.&S	D. C.	1006 Otis Place.
Eisenhart, Sophie Helen, A.&S	Mich.	The Cairo.
Eldridge, Hattie Dayton, T.C	N. C.	1627 Lamont Street.
Elias, Harold L., A.&S	S. C.	910 15th Street.
Ellwood, William Adam, Eng.c	N. Y.	635 F Street, N. E.
Embry, John A., C.P.S	Fla.	Dept. of Justice.
Engel, Abraham, A.&S	N. Y.	306 G Street, N. E.
Engel, Morris Edward, Eng.m	Pa.	1016 South Carolina Avenue, S. E.
Enger, Melvin Cornelius, A.&S	Minn.	1225 11th Street.
Entler, Marguerite Hendrickson, A.&S	Ore.	The Wellington.
Evans, Florence Elizabeth, A.&S	Ohio.	808 1st Street.
Evans, Helen Marie, T.C A.B., 1908, The George Washington University.	D. C.	1348 Euclid Street.
Everett, John Ridden, T.C	Minn.	U. S. Weather Bureau.
Ewing, Paul Albert, A.&S	Nebr.	300 East Capitol Street.
Fant, Jessie DuBois, T.C	Utah.	115 12th Street, S. E.
Farmer, James Price, A.&S	D. C.	154 A Street, N. E.
Faunce, Mary E., A.&S	D. C.	317 11th Street, S. W.
Feigenbaum, Henry Clemence, C.P.S	N. Y.	520 E Street, N. E.
Feldman, Abraham, A.&S	Russia	805 4th Street, S. E.
Ferguson, Elizabeth, T.C	D. C.	1239 Kenyon Street.
Ferguson, Marion Frances, A.&S	D. C.	1239 Kenyon Street.
Fickas, Melville Philip, A.&S	Ariz.	1311 13th Street.
Finch, Elmer Harrison, Eng.c	D. C.	1211 Q Street.
Finkel, Henry Charles, C.P.S LL.B., 1904, The George Washington University.	D. C.	Bond Building.
Fisher, Lewis Civille, C.P.S	D. C.	The Imperial.
Fleming, John Paton, A.&S	Va.	1861 Wyoming Avenue.
Fletcher, Charles Cloyes, A.&S M.D., National Medical School.	N. Y.	1430 Meridian Place.
Foo, Hsen Shuen, C.P.S A.B., 1906, Chang-Chang College, China. LL.B., 1911, The George Washington University.	China.	Chinese Legation.
Ford, Tod, Jr., C.P.S	Calif.	The Brighton.
Foster, LeRoy B., A.&S	Ohio.	1502 Vermont Avenu.
Francis, Grace, A.&S	Ala.	1732 Willard Street.

Name.	Legal residence.	City address.
Frazier, Elmer Sefton, C.P.S.	D. C.	125 S Street.
Frey, Ralph Wylie, A.&S.	D. C.	1343 Q Street.
Frizzell, Genevieve Margaret, T.C	D. C.	241 8th Street, N. E.
Gabriel, Henry. C.P.S.	Ohio	1224 13th Street.
Gahn, Henrik Colquhoun, A.&S.	D. C.	3145 Mt. Pleasant Street.
Galbraith, Esther Elizabeth, A.&S	Pa.	3006 11th Street.
Gass, Charles Benjamin, A.&S.	Md.	1302 R Street.
Gauss, John James, C.P.S.	D. C.	411 K Street, N. E.
LL.B., 1907, Georgetown University.		
Gerhart, Herbert, Benjamin, C.P.S	Pa.	1822 H Street.
Geschickter, Jeanette, A.&S.	D. C.	1239 12th Street.
Giantvalley, Earl Arnold, A.&S.	Minn.	National Museum.
Gibbs, Kate Maria, T.C.	Mass.	1216 S Street.
Gilliss, Helen, T.C.	D. C.	1307 Kenyon Street.
Glenn, Laura Emily, T.C.	D. C.	708 8th Street, N. E.
Glueck, Nathan H., A.&S.	Wis.	1115 Clifton Street.
Goodman, Estelle Annette, T.C.	D. C.	520 E Street, N. E.
Gordon, Helen, T.C.	Ill.	1627 Lamont Street.
Gorman, Alexander, A.&S.	D. C.	1727 Kilbourne Place.
Gore, Michael Alvord, A.&S.	D. C.	1147 New Hampshire Avenue.
Graham, Edgerton Goldsborough, Eng.	D. C.	616 Keefer Place.
Grebe, Walter C., Eng.m.	D. C.	817 15th Street.
Graduate, U. S. Naval Academy.		
Green, Andrew Jordan, C.P.S.	D. C.	
LL.M., 1905. The George Washington University.		
Greenwald, Harold Putnam, Eng.c	D. C.	1749 Lanier Place.
Greenway, Charles Thomas, A.&S	Iowa	2003 H Street.
Griffith, Alice Eleanor, A.&S.	D. C.	1846 Ontario Place.
Grouard, Maria Louise, T.C.	N. H.	1600 Scott Circle.
Grunwell, John Roscoe, Eng.	D. C.	1515 30th Street.
B.S., in Arch., 1909, University of Pennsylvania.		
Gsantner, Otto Carl, A.&S.	D. C.	2811 24th Street, N. E.
Guerrant, Sallie A., A.&S.	Va.	1212 34th Street.
Hafford, Thomas A., Eng.c.	N. Y.	1215 O Street.
Haines, Ora E., A.&S.	D. C.	C/o Civil Service Com.
Hall, Frank Loomis, A.&S.	Mich.	313 East Capitol Street.
Halls, Jay C., C.P.S.	Wis.	1432 M Street.

Name.	Legal residence.	City address.
Halsey, Arthur Sherman, Eng.m	Pa.	207 East Capitol Street.
Hamlin, Herbert Samuel, A.&S.	Utah.	1100 Vermont Avenue.
Hammerley, Helen Augusta, A.&S	Va.	1511 T Street.
Hancock, Walter Edgar, A.&S.	Tex.	Takoma Park, D. C.
Handelsman, Samuel, A.&S.	N. Y.	1104 5th Street.
Hanson, Elisha A., Jr., C.P.S.	Ill.	119 Maryland Ave., N. E.
Hanvey, Edna E., A.&S.	D. C.	1315 Emerson Street.
Harden, Fred Geer, C.P.S.	Nebr.	231 B Street, N. E.
A.B., 1907, A.M., 1908, University of Nebraska.		
Hardy, Margaret Boude, A.&S.	D. C.	638 East Capitol Street.
Hardy, Rose Lees, A.&S.	D. C.	638 East Capitol Street.
Hargrave, Clarence Moore, A.&S	Ind.	612 Y. M. C. A.
Harkness, Arthur Williams, A.&S	Ind.	2224 F Street.
Harper, Charles W., Eng.	S. C.	The Astoria.
Harrington, George Traver, A.&S	Vt.	1120 Virginia Ave., S. W.
B.S., in Agriculture, 1909, University of Vermont.		
Harris, Albert Lewis, Eng.a.	D. C.	1505 Lamont Street.
Harrison, Bessie McKenney, T.C	D. C.	931 S Street.
Harrison, Henry Turner, Eng.	Md.	College Park, Md.
Harrison, Robert Horace, Eng.c	D. C.	2208 1st Street.
Harsch, Erwin, Eng.c.	Ohio.	1318 Maryland Ave. N. E.
Hart, John Allen, Eng.c.	Tex.	314 East Capitol Street.
Hart, Louise Goff, T.C.	W. Va.	515 B Street, N. E.
Hart, Raymond Sagar, Eng.a	D. C.	No. 22, The Hoffman, 1332 Belmont Street
Harter, Eugene C., C.P.S.	D. C.	923 12th Street.
Haslup, Alice Elma, T.C.	D. C.	2114 18th Street.
Hathaway, Lillie Theresa, A.&S	D. C.	1615 Swann Street.
B.S., 1910, The George Washington University.		
Hauke, Rilla May, A.&S.	Wash.	605 Mass. Ave., N. E.
Hawkins, Margaret Amelia, T.C	D. C.	1223 Fairmont Street.
Hayden, Leo J., C.P.S.	Mich.	Civil Service Com.
Hayes, Harold C., C.P.S.	D. C.	2111 Bancroft Place.
Head, James William, C.P.S.	Va.	Barcroft, Va.
Hearne, Susan Snell, A.&S.	Mo.	1307 P Street
Hecht, Max, A.&S.	N. Y.	1476 Clifton Street.

Name.	Legal residence.	City address.
Heisley, George Edgar, Eng.	D. C.	1114 Monroe Street.
Heitmuller, George Roeder, C.P.S	D. C.	1307 14th Street.
Hellman, Dorothy, T.C.	Wyo.	2804 Cathedral Ave.
Hellman, Florence S., A.&S.	Wyo.	2804 Cathedral Ave.
Hemrich, Ernest Edward, A.&S.	D. C.	1100 Vermont Avenue.
Henry, Alfred J., A.&S.	Va.	Mount Weather Observatory, Bluemont, Va.
Henry, Irbie Clinton, A.&S.	Mo.	H. of Rep., Office Bldg.
Hermanns, Anna Marie, T.C.	Md.	2153 L Street.
Herndon, Neal N., Eng.c.	Ala.	1515 Vermont Ave.
Heron, Louis Mann, Eng.e.	D. C.	1322 14th Street.
Hersey, Harold Brainard, A.&S.	Mont.	Congressional Library.
Hession, John H., Eng.c.	Mass.	1419 W Street.
Hicks, Russell E., A.&S.	Md.	Rockville, Md.
Hidalgo-Rizal, Alfredo, C.P.S. B.S., Lycee de Manila LL.B., National University.	P. I.	No. 51, The Brunswick.
Hill, G. Sydney, C.P.S.	Mass.	1734 Penn. Ave.
Hill, Harry D., A.&S.	Ind.	1845 Calvert Street.
Hitchcock, Geraldine, A.&S.	Wash.	The Highlands.
Hobbs, Enid Marian, A.&S.	Canada	1370 Perry Place.
Hobbs, Ewart William, C.P.S.	Ill.	1370 Perry Place.
Hodgkins, George Wilson, A.&S	D. C.	1830 T Street.
Hodgkins, Howard Wilkerson, Eng.c	D. C.	1830 T Street.
Hoffman, Edwin S., Eng.e.	Pa.	1007 Mass. Ave. N. E.
Holden, Brigid Elizabeth, A.&S.	D. C.	488 I Street, S. W.
Holmes, Ronald M., A.&S.	Pa.	726 3rd Street, N. E.
Holmes, Thomas N., Eng.	Pa.	
Hospital, Ralph, A.&S.	D. C.	3500 15th Street, Brookland, D. C.
Hough, Roland P., Eng.c.	Va.	Clarendon, Va.
Houghton, Carlos Cranford, A.&S	D. C.	2011 Kalorama Road.
Howard, Charles Edward Nason, U.S.A., Eng.	D. C.	1929 K Street.
Howard, Dudley Blanchard, Eng.	D. C.	314 East Capitol Street.
Howard, William J., A.&S.	Colo.	1815 Taylor Street.
Howell, Humphrey Daniel, C.P.S	D. C.	724 10th Street, N. E.
Huff, Daisie Ione, T.C.	Ill.	1223 12th Street.

Name.	Legal residence.	City address.
Hughes, Lotus Graham, C.P.S.	D. C.	631 East Capitol Street.
Hull, Flora, A.&S.	Nebr.	The Iowa.
Hummer, Elizabeth Alice, A.&S	D. C.	638 East Capitol Street.
Hunt, Stella Josephine, A.&S.	Tex.	9 B Street.
Hurley, Patrick, C.P.S.	Okla.	1331 Vermont Avenue.
A.B., Bacone University. LL.B., National Law School.		
Hynson, Richard Washburn, C.P.S	D. C.	1335 N Street.
Ingram, Charlton Weber, Eng.m	D. C.	713 Taylor Street.
Jack, Julia Gordon, A.&S.	D. C.	1326 Corcoran Street.
Jackson, Maude Lillian, A.&S.	D. C.	3630 13th Street, N. E.
James, William Stubbs, Eng.c.	Mass.	1504 R Street.
Janer, Ramon Isaac, C.P.S.	P. R.	Apt. 16, The Maxwell.
Jeffrey, Warren Perry, Eng.	Wash.	1502 Vermont Avenue.
Jeffrey, Frank Rumer, A.&S.	Wash.	1502 Vermont Avenue.
Johnson, Bert D., A.&S.	D. C.	1926 T Street.
Johnson, Charles Albert, T.C.	D. C.	2837 12th Street, N. E.
Johnson, Robert, C.P.S.	Mo.	1219 Connecticut Ave.
A.B., 1911, The George Washington University.		
Johnson, Ross Holbrook, A.&S.	D. C.	1804 Belmont Road.
Johnston, Anna E., A.&S.	Ohio	1028 8th Street.
Jones, Eleanor Isabelle, A.&S.	D. C.	Apt. 8, 1440 Meridian Place.
Jones, James Lyons, Eng.e.	Pa.	818 Allison Street.
Jones, J. Walter, C.P.S.	Canada	1657 31st Street.
B.S.A., 1909, Toronto University. A.B., Arcadia University.		
Jones, Melville Emory, Jr., Eng.e	D. C.	900 F Street.
Jonscher, Robert A., A.&S.	D. C.	312 C Street, N. E.
Judd, Edwin E., C.P.S.	D. C.	15 Todd Place, N. E.
Kaulbeck, Clarence L., C.P.S.	Pa.	Hyattsville, Md.
Kause, Robert Lincoln, Eng.c.	Ohio	1905 Jackson St., N. E.
Keats, Harold, A.&S.	Pa.	2449 18th Street.
Keene, Elwood Ray, Eng.	D. C.	1664 Columbia Road.
Keithley, Joseph Rayburn, C.P.S	Mo.	1831 G Street.
B.S., 1908, B.S., 1911, University of Missouri.		
Kellberg, Ira Newton, A.&S.	Pa.	1914 Calvert Street.
Kelley, Eva Phelps, A.&S.	Nebr.	213 Holly Ave., Takoma Park,

Name.	Legal residence.	City address.
Kelly, Walter E., C.P.S	Ohio	18 5th Street, S. E.
Kelly, William Francis, Jr., Eng.c	D. C.	2117 Flagler Place.
Kennedy, Charles Bayard, Eng.m	D. C.	1304 13th Street.
Kent, Henry J., Eng.e	Mass.	3145 Mt. Pleasant Street.
Kent, Lavinia Grace, A.&S	Me	103 8th Street, N. E.
Kerby, Florence Marcellina, A.&S	D. C.	2606 L Street.
Kerby, Katharine, A.&S	D. C.	2606 L Street.
Kersey, Virginia, T.C	D. C.	1312 L Street.
King, Edith Haynes, A.&S	Ohio	918 M Street.
King, Howard Perley, Eng.c	D. C.	3515 14th Street.
King, Myrtle Virginia, T.C	D. C.	328 10th Street, N. E.
Kingsbury, Joseph Bush, A.&S	Iowa	Y. M. C. A.
Kingsley, Clara Gladys, A.&S	D. C.	
Kinsell, Rex Emir, A.&S	Iowa	1335 Mass. Ave., S. E.
Kirk, Theodore Tilton, Eng.c	Ky	1223 12th Street.
Kisseleff, Charles William, Eng.c	D. C.	1517 5th Street.
Knudtson, Clarence A., A.&S	Wis.	610 22nd Street.
Krentzlin, Leopold Ludwig, C.P.S	S. C.	The Congressional.
Kruger, Henry Alexander, Eng	D. C.	726 9th Street, S. E.
Kuehn, Herman A., Eng.c	Ind.	411 P Street.
Kuntz, Celia B., A.&S	Ky.	211A Bates Street.
Lamson, Frank S., Eng.e	D. C.	1715 Kilbourne Place.
Landon, Chauncey L., C.P.S	D. C.	2304 Penn. Ave.
Lawson, Margaret Lucile, T.C	D. C.	206 13th Street.
Le Duc, Percy Walborn, Eng.c	D. C.	817 Varnum Street.
Leland, Florence Ruth, A.&S	D. C.	2L6 Fifth Street, S. E.
Lenney, John Joseph, C.P.S	Va.	1412 Mass. Avenue.
Leonard, Lewis Thompson, A.&S	D. C.	520 G Street, N. E.
Leonard, William Michael, Eng.e	Pa.	520 G Street. N. E.
Lepper, Henry Albert, A.&S	D. C.	1620 6th Street.
Lewis, Vera Perkins, A.&S	D. C.	1116 12th Street, N. E.
Liebschutz, Eugenie, T.C	France	1446 Irving Street.
Lind, Ida May, T.C	Iowa	4516 14th Street.
Lindsay, Alfred Briscoe, A.&S	D. C.	1809 18th Street.
Litchfield, Henry Edward, Eng	D. C.	308 L Street, S. E.
Llufrio, Albert Vincent, A.&S	D. C.	618 8th Street, N. E.
Lock, Elmer, A.&S	Miss.	1126 G Street.

Name.	Legal residence.	City address.
Lodholz, Louis, A.&S.	Pa.	Y. M. C. A.
Louis, Hsiao Min, C.P.S.	China.	Chinese Legation.
M.A., 1910, College of Languages, Peking, China.		
Lovering, George Varnum, A.&S	D. C.	Interstate Com. Com.
Luckings, Harry C., A.&S.	N. J.	522 7th Street, N. E.
Luebkert, Timm Adolph, Eng.c.	D. C.	1030 D Street, N. E.
Lugo-Vina, Wences, A.&S.	P. R.	147 Carroll St., S. E.
Lusby, Charles Edward, A.&S.	D. C.	2909 O Street.
Mc Adams, Ralph W., Eng.c.	Kans.	507 B Street, N. E.
McCabe, Lulu Mignonne, A.&S.	Kans.	3469 14th Street.
McCalip, Curtis Edgar, Eng.e.	D. C.	123 12th Street, S. E.
McChristie, Minor Everet, A.&S	Ohio.	1316 Columbia Road.
McCormack, Joseph, A.&S.	Pa.	1318 13th Street.
McCormick, John D., Eng.c.	D. C.	1377 North Carolina Ave.
MacFarlane, Nellie Rae, T.C.	D. C.	1719 13th Street.
MacIntosh, Anna Belle, T.C.	N. Y.	317 F Street, N. E.
McKnew, Jane Marion, T.C.	D. C.	2112 G Street.
McLeran, John D., A.&S.	Miss.	401 M Street, N. E.
McMahon, Margaret Agnes, T.C	D. C.	1342 R Street.
B.S., 1906, M.A., 1907, The George Washington University.		
Magruder, Oliver Graham, Eng.c	D. C.	54 U Street.
Manly, Basil M., C.P.S.	Va.	Bureau of Labor.
Marcus, Mandel Manning, C.PS	Wis.	Apt. 42, The Valois.
Marino, Charles George, A.&S.	N. Y.	1328 I Street.
Marks, Joseph, Eng.c	Pa.	903 F Street, N. E.
Marshall, William Francis, C.P.S	R. I.	615 22nd Street.
Marvin, Francis Edwin, Eng.e.	N. Y.	606 F Street, N. E.
Mascolo, Edward, A.&S.	Conn.	221 1st Street.
Mason, Charles Sumner, Eng.a.	D. C.	Langdon, D. C.
Mason, Josephine Dwight, T.C.	Mass.	132 A Street, N. E.
Mason, Samuel Worcester, Eng.e	Va.	308 B Street, N. E.
Massey, Jerry C., C.P.S.	Okla.	House Document Room.
Matteassian, Edward M., C.P.S.	Turkey	616 18th Street.
A.B., 1908, Robert College, Constantinople.		
Maxson, Louis Archer, A.&S.	Md.	Kensington, Md.
Mayes, Basil Lamar, C.P.S.	Miss.	1733 17th Street.
Meany, Lloyd Emmart, Eng.c.	D. C.	908 23rd Street.
Meeks, Sallie L., A.&S.	D. C.	4127 9th Street.
Mehurin, Roger Melville, A.&S.	Va.	1305 10th Street.

Name.	Legal residence.	City address.
Meier, Julius Earnest, A.&S.	Ohio	910 M Street.
Mentzer, Florence Eberly, A.&S	Pa.	605 N. C. Ave. S. E.
Merritt, Engene, C.P.S.	D. C.	Chevy Chase, Md.
A.B., 1903, Cornell University.		
Merritt, Leonard Atkins, C.P.S.	Minn.	Dept. of State.
LL.B., 1904, LL.M., 1905, The George Washington University.		
Middleton, Herbert Paul, Eng.c.	N. Y.	1506 Q Street.
Miller, Allison Nailor, A.&S.	D. C.	Cleveland Park, L. C.
Miller, Dayton Baird, A.&S.	D. C.	15 Quincy Place.
Milliken, Florence Ethel, T.C.	D. C.	463 P Street.
Minor, Mary Virginia, A.&S.	Va.	403 The Alabama.
Mizell, J. Zachary, A.&S.	Fla.	Y. M. C. A.
Moneyway, James Lewis, A.&S.	Ala.	1454 Fairmont Street.
Monk, Ella May, T.C.	N. Y.	902 Mass. Ave. N. E.
Moore, Kate Carroll, A.&S.	D. C.	2024 15th Street.
Moore, Milton Donaldson, A.&S	S. C.	1410 Euclid Street.
Moore, Thomas Emmitt, A.&S.	D. C.	45 Quincy Street.
Moreland, John Edwin, Eng.e.	D. C.	1113 15th Street.
Morgan, William Harper, C.P.S	Ala.	413 N. J. Ave., S. E.
A.B., University of Alabama.		
Morrison, Hugh Shannon, Eng.	D. C.	Station H, R. D. No. 1, Washington, D. C.
Moyer, Florence, A.&S.	D. C.	610 8th Street, N. E.
Muench, Elsa Dorothea, A.&S.	D. C.	1354 Monroe Street.
Mulligan, William Miles, A.&S.	D. C.	3105 11th Street.
Murray, Thomas Patrick A., Eng.	Mass.	1830 G Street.
Nash, Jamse P., Eng.c.	Pa.	718 19th Street.
Nealy, Ronald Beaman, C. P.S.	D. C.	The Woodley.
Nettleton, Leigh Lanman, C.P.S.	Utah.	1822 H Street.
Neumann, Frederica, T.C.	Ill.	701 A Street, S. E.
Newbold, Katharine Mitchell, A.&S.	Md.	11 Irving Street, Chevy Chase, Md.
Newton Grace Gadsdon, T.C.	D. C.	1831 Belmont Road.
Nickles, Edward Belmer, Eng.m.	D. C.	122 Florida Avenu.
Norcross, Mae Ruth, A.&S.	D. C.	The Albemarle.
Norton, Frederick Aloysius, A.&S.	Mass.	115 I Street.
Nusbaum, Jesse Logan, A.&S.	Colo.	1326 L Street.

Name.	Legal residence.	City address.
Nyman, Arthur O., A.&S.	Ill	58 Seaton Place.
Oberly, Portia Meredith, T.C.	N. H.	2619 Garfield Street.
Oldsen, Carl H., A.&S.	Iowa	1800 Belmont Road.
Olson, Oliver Malvin, A.&S.	Iowa	Y. M. C. A.
O'Rourke, Francis Joseph, Eng.	R. I.	1773 T Street.
Ossire, Cora Amelia, T. C.	D. C.	2729 Ontario Road.
Osterhout, Karl Jackson, A.&S.	Pa.	1424 W Street.
Outwater, Kate Sorrell, T. C.	Va.	620 F Street, S. W.
Palmer, Elizabeth Downer, A.&S.	D. C.	2818 13th Street.
Panopio, Eliseo M., Eng.	P. I.	509 6th Street.
Passet, Bernhardt J., A.&S.	N. J.	815 11th Street.
Patterson, Russell Brown, Eng.	N. H.	2016 15th Street.
A.B., Dartmouth College.		
Patterson, Ruth Capelle, T. C.	D. C.	2016 15th Street.
Paulson, Peter C., C.P.S.	Iowa	Interstate Com. Com.
A.B., 1904, Luther College.		
Pearce, Lida Marie, T.C.	D. C.	1737 S Street.
Peck, Caro B., Eng.	Ill.	1263 Irving Street.
Perry, Emily Kershaw, A.&S.	D. C.	1863 Mintwood Place.
Peterson, Frank Daniel, Eng. c.	Ill.	17, Y. M. C. A.
Pfaender, Max C. P. S.	D. C.	1518 9th Street.
Phillips, George Washington, Eng. c.	D. C.	612 18th Street.
Pidgeon, Charles Chandlee, A.&S	D. C.	1207 Harvard Street.
Pierce, Sara, A.&S.	D. C.	1350 Oak Street.
Piggott, Mary Elizabeth, T. C.	Va.	East Falls Church, Va.
Pillow, Gideon Johnson, C.P.S.	La.	1414 Clifton Street.
LL.B., 1911, The George Washington University.		
Planck, Mildred Marion, A.&S.	Nebr.	27 B Street.
Poole, George Eng. m	D. C.	903 E Street. S. E.
Pope, Ruth Vesta, A.&S.	Calif.	1340 Meridian Place.
Potbury, Robert John, Eng.c.	D. C.	1131 Euclid Street.
Potter, Charles Hollister, A.&S.	D. C.	918 F Street.
Pozen, Morris A., A.&S.	D. C.	1214 6th Street.
Phar.D., 1908, The George Washington University.		
Procter, Arthur Wyman, C.P.S.	Nebr.	518, Y. M. C. A.
Pulliam, Jesse H., A.&S.	Miss.	1826 G Street.
Quarton, Harold Barlow, C.P.S.	Iowa	1100 Vermont Avenue.
Phar. B., 1908, Grinnell College.		
Rager, Amy Elizabeth, A.&S.	D. C.	812 21st Street.
Raymond, Norman Ticknor, C.P.S.	N. J.	1486 Chapin Street.
Reavis, Andrew Bryant, A.&S.	Tenn.	The Northumberland.

Name.	Legal residence.	City address.
Reavis, Joseph Patrick, A.&S.	Tenn.	The Northumberland.
Redfield, Arthur Huber, A.&S.	D. C.	9 Randolph Place, N. E.
Reese, Clarence Herbert, A.&S.	D. C.	208 D Street.
Reese, Francis Sydney, Eng.m.	Md.	1324 Mass. Avenue.
Reeve, Felicia Ann, T.C.	D. C.	1626 19th Street.
Reges, Max F., Eng.c.	N. J.	1339 3rd Street.
Reinhardt, John J., A.&S.	Nebr.	1908 H Street.
Reisinger, Margaret Edna, A.&S.	D. C.	1836 4th Street.
Renner, Wilbert Vernon, Eng.c.	D. C.	Langdon, D. C.
Richard, Vernon Irving, A.&S.	D. C.	309 B Street, N. E.
Richards, Henry Tilton, A.&S.	Mass.	1433 L Street.
Richards, Ruth Bergman, A.&S.	D. C.	101 Mass. Avenue.
Riggles, Joseph Richard, Jr., A.&S.	D. C.	1328 Fairmont Street.
Riley, Flora M., A.&S.	D. C.	1754 S Street.
Ritt, Joseph Fels, A.&S.	N. Y.	1304 Belmont Street.
Robertson, John Porteous, Eng.	Nebr.	1100 Vermont Avenue.
Roberts, Iorwerth J., A.&S.	Pa.	1731 13th Street.
Robinson, Ednah Florence, T.C.	D. C.	2623 Garfield Street.
Rodgers, Alexander, Jr. A.&S.	D. C.	1221 Connecticut Ave.
Rogers, Edith, A.&S.	Va.	1311 K Street.
Rogers, Frank Beecher, Eng.c.	N. Y.	1310 Girard Street.
Rohrer, Joseph R., A.&S.	Ohio.	932 I Street.
Rollins, Helen Gertrude, T.C.	Mich.	1534 A Street, N. E.
Rollins, James Herrell, T.C.	Va.	R. F. D. No. 2, Alexandria, Va.
Rose, Anna Lorette, A.&S.	Pa.	301 S Street, N. E.
Rose, Leonard Julian, Eng.c.	D. C.	1442 S Street.
Rosen, Urban F., Eng.m.	D. C.	127 C Street, S. E.
Roundy, Paul Vere, A.&S.	N. Y.	U. S. Geological Survey.
Rous, Ella Woolford, T.C.	D. C.	1906 Florida Avenue.
Rubino, Peter Joseph, A.&S.	N. Y.	Y. M. C. A.
Rucker, Mariamne Councill A.&S.	Va.	Clarendon, Va.
Russell, Paul G., A.&S.	D. C.	3538 Warder Street.
Safford, Howard Palmer, Eng.e	D. C.	1933 Park Road.
St. Clair, Albert Thurston, Eng.e	D. C.	1319 T Street.
Salant, Annie, A.&S.	N. Y.	1647 Lamont Street.

Name.	Legal residence.	City address.
Sale, Prentiss Dixon, Jr., Eng.c.	D. C.	225 8th Street, N. E.
Sanborn, George Allen, A.&S.	Wis.	
Sandberg, Adolph, A.&S.	D. C.	1402 14th Street.
Sanders, Elsie, T.C.	D. C.	1515 Park Road.
Scales, Freeman M., Eng.	Ky.	1477 Newton Street.
Schladt, George J., Eng.e.	D. C.	Potomac Heights.
Schlosser, Julius L., A.&S.	D. C.	31 Maple Street, Takoma, D. C.
Schmidt, Meta, A.&S.	D. C.	1104 P Street.
Schmitt, Edwin Alexis, Eng.c.	D. C.	211 Florida Avenue.
Schmitt, Hugo Rudolph, Eng.e.	D. C.	211 Florida Avenue.
Schoenfeld, Herbert Hermann, Eng.m.	D. C.	3448 34th Place, Cleveland Park.
Schul, Louise Amy, A.&S.	D. C.	235 New Jersey Avenue.
Scott, Joseph Addison Preston, Jr., Eng.c.	D. C.	902 Maryland Ave. N. E.
Scott, Leila Fordham, A.&S.	D. C.	649 B Street, N. E.
Seaman, Alexander Rives A.&S.	Va.	Drawer 148, Alexandria, Va.
Seiler, Paul Basil, A.&S.	N. J.	1012 15th Street.
Se Legue, Charles Albert, A.&S.	Ind.	1400 Chapin Street.
Semones, Julia Angie, T.C.	Va.	Falls Church, Va.
Shackelford, Arline Edison, A.&S.	Mo.	Washington College.
Shuman, Royal Lewis, A.&S.	D. C.	3519 14th Street.
Sikken, Janet Melvin, A.&S.	D. C.	129 T Street.
Silvester, Jane B., A.&S.	D. C.	2005 Kalorama Road.
Simpson, Buhl, A.&S.	Md.	1445 Mass. Avenue.
Simpson, Walter Scott, Eng.	D. C.	508 10th Street, S. E.
Skinner, Arthur William, Eng.m.	Md.	Takoma Park, D. C.
Slarrow, Mary Gordon, A.&S.	D. C.	1308 13th Street.
Slarrow, Malcolm Gordon, Eng.c.	D. C.	1308 13th Street.
Slindee, Michael E., C.P.S.	Ind.	Y. M. C. A.
LL.M., 1910, Georgetown University.		
Sloane, Charles Edward, Eng.	D. C.	1733 T Street.
Smallwood, Dorothy Archibald, A.&S.	D. C.	2107 S Street.
Smith, Duncan Campbell, A.&S.	Md.	Rockville, Md.

Name.	Legal residence.	City address.
Smith, Frank Brown, C.P.S.	Md.	1318 12th Street.
Smith, Janie Alice, A.&S.	D. C.	637 Mass. Ave. N. E.
Smith, McClain Baruitz, Eng.e.	Pa.	658 Morris Street, N. E.
Smith, May Wolfe, A.&S.	Minn.	1511 13th Street.
Smith, Robert Hamilton, C.P.S.	D. C.	1746 Kalorama Road.
Smith, Rodney Marshall, Eng.c.	D. C.	619 12th Street, N. E.
Smith, Vincent Baker, Eng.c.	D. C.	3007 P Street.
Snelling, Henry Horner, Eng.m.	Va.	3522 10th Street.
Soling, Abraham, Eng.	N. Y.	Bureau of Standards.
Southgate, Letitia Park, A.&S.	D. C.	432 Warner Street.
Sparrow, Robert Carlton, Eng.	D. C.	2955 Tilden Street.
Spear, Hiram Eugene, A.&S.	D. C.	1241 Morse Street, N. E.
Springer, Lew Wallace, C.P.S.	Wis.	The Benedict.
Stambaugh, Josephine, A.&S.	Va.	Falls Church, Va.
Stannard, Winfield Hancock, A.&S.	Mass.	1304 L Street.
Stearns, Orlo Foster, A.&S.	Mass.	1610 13th Street.
Steck, Charles Frederick, A.&S.	D. C.	1620 Riggs Place.
Steinberg, Aaron, A.&S.	N. Y.	300 14th Street, S. W.
Steinberg, Abraham, A.&S.	N. Y.	300 14th Street, S. W.
Stevens, Arthur E., A.&S.	Ohio.	147 Tenn. Ave. N. E.
Stewart, Elmer, A.&S.	D. C.	1812 Lamont Street.
Stockard, Marietta, T.C.	N. C.	1627 Lamont Street.
Stockton, Thomas Jefferson, Eng.e.	Kans.	1944 2nd Street.
Stoddard, Alfred L., A.&S.	Iowa.	1426 6th Street.
Stoll, Clara, A.&S.	Austria.	1302 Rhode Island Ave.
Stotelmyer, George B., Eng.c.	D. C.	1342 Riggs Street.
Stratton, Henry Alexander, C.P.S.	N. J.	Y. M. C. A.
Stutler, H. Ward, Eng.a.	W. Va.	1736 G Street.
Stutzman, William Ernest, Eng.e.	D. C.	3533 Warder Street.
Stuwe, John Daniel, Eng.c.	Minn.	1307 13th Street.
Summy, Ethel Isabelle, A.&S.	D. C.	1623 R Street.
Summy, Katherine Strong, A.&S.	D. C.	920 19th Street.
Summy, William Frank, A.&S.	D. C.	1623 R Street.
Swann, Theodore Magruder, A.&S.	Md.	Clarendon, Va.

Name.	Legal residence.	City address.
Swartzell, John Naylor, Eng.m.	D. C.	2117 Bancroft Place.
Taggart, Earl, A.&S.	Kans.	Y. M. C. A.
Tauberschmidt, John A., A.&S.	D. C.	922 Westminster Street.
Taylor, Edward Thomas, A.&S.	Colo.	Y. M. C. A.
Taylor Irving Paul, A.&S.	D. C.	1433 Belmont Street.
Taylor, James Norman, A.&S.	Del.	1315 K Street.
Taylor, Nellie Boyd, T.C.	D. C.	1753 Columbia Road.
Taylor, Olivia Alexander, A.&S.	D. C.	The Exeter.
Taylor, Summers Wilson, Eng.e.	D. C.	1224 13th Street.
A.B., 1907, Wofford College.		
Tepper, Benjamin L., C.P.S.	N. J.	1244 Evarts Street, Brookland, D. C.
LL.B., 1910, Georgetown Law School.		
Terry, Leo Claude, A.&S.	Pa.	1019 Lamont Street.
Thatcher, Arthur S., A.&S.	Pa.	The Nansemond.
Thomas, Charles Lenton, A.&S.	Tex.	1119 K Street.
Thomas, Frank Wheelock, A.&S.	D. C.	18th and Park Road.
Thompson, Alfred Wright, A.&S.	D. C.	1624 Riggs Place.
Thompson, Harry Woodward, Eng.m.	Iowa.	1340 Girard Street.
Thorne, Harold Carrier, Eng.e.	D. C.	Bureau of Standards.
Thorwarth, Julia Helen, A.&S.	Minn.	1320 Park Road.
Thrall, Edward Wolff, A.&S.	D. C.	1533 T Street.
Tiffany, Emma Ruth, T.C.	D. C.	3409 Brown Street.
Tilton, Fletcher Sandford, A.&S.	N. H.	2947 Tilden Street.
Towers, Edwin Gardner Weed, Eng.	Md.	Mechanical Dept., S. R. R., 1300 Penn. Ave.
Towner, Horace Cole, A.&S.	Iowa.	The Marlborough.
Townsend, Tyler H., Eng.c.	Tex.	1611 Lincoln Ave., N. E.
Truesdell, Leon Edgar, C.P.S.	Vt.	1300 10th Street.
Trumbower, Eli C., Jr., A.&S.	Del.	1714 Q Street.
Tyler, G. W., C.P.S.	Iowa.	Y. M. C. A.
LL.B., 1909, LL.M., Georgetown University.		
Ulrickson, Hilda Louise, A.&S.	D. C.	617 21st Street.
Underwood, Harriet, T.C.	D. C.	2551 37th Street.

Name.	Legal residence.	City address.
Underwood, Mary Louise, T.C.	D. C.	707 East Capitol Street.
Upton William Baly, Jr., Eng.	D. C.	3420 Newark Street, Cleveland Park.
Van Arsdale, Emily, A.&S.	D. C.	The Imperial.
Vandegrift, John Leslie, Eng.c.	D. C.	1214 G Street, N. E.
VanKirk, Lloyd Howard, A.&S.	Pa.	1854 Ingleside Terrace.
Van Loock, Louis Anthony, Eng.	D. C.	104 15th Street, N. E.
Van Vleck, Arthur Nye, A.&S.	D. C.	1410 Euclid Street.
Van Waters, Sherwood, P., A.&S.	N. Y.	408 3rd Street.
Varney, Forrest F., Eng.c.	Wis.	Y. M. C. A.
Veihmeyer, Frank, Eng.c.	D. C.	1518 S Street.
Wagner, Charles H., Eng.c.	D. C.	3319 P Street.
Wagner, Lawrence R., A.&S.	N. Y.	802 L Street.
Waite, Stanley Sargent, C.P.S.	Okla.	1331 Vermont Avenue.
LL.B., 1910, Georgetown University.		
Wakefield, Walter Harold, Eng.c.	Md.	129 Maple Avenue. Takoma Park.
Walker, Alberta, T.C.	D. C.	1634 S Street.
Walker, Janet Gibson, A.&S.	D. C.	420 B Street, N. E.
Walker, Rosalie, A.&S.	D. C.	420 B Street, N. E.
Wall, Adelaide Dorothy, A.&S.	D. C.	4011 14th Street.
Wallace, Sebon Rains, A.&S.	D. C.	1004 Euclid Street.
Walters, Marion Irven, Eng.c.	D. C.	3228 Warder Street.
Walton, George Pelham, A.&S.	Ind.	Langdon, D. C.
Walton, Melville Ralph, A.&S.	Ill.	816 I Street, N. E.
Warner, Harold Ellsworth, A.&S.	D. C.	1020 9th Street.
Washburn, Duane E., C.P.S.	D. C.	Dept. of State.
Watskey, Jack, A.&S.	Va.	The Cumberland.
Webb, James William, Eng.	D. C.	1314 East Capitol Street.
Weber, John Augustus, Eng.	D. C.	518 6th Street, N. E.
Weibel, Ernest Edward, A.&S.	Kans.	3410 Newark Street.
Weller, Ethel Marguerite, A.&S.	D. C.	753 8th Street, S. E.
Wells, Sadie Harriman, T.C.	N. H.	1512 P Street.
Wharton, Roger Daniel, Eng.c.	D. C.	3411 Oakwood Terrace.
White, Mary Josephine, T.C.	Ohio	National Park Seminary, Forest Glen, Md.
Whitzell, Margaret Eva, T.C.	D. C.	1218 11th Street.
Wiest, Edward, T.C.	Pa.	1443 Mass. Avenue.

Name.	Legal residence.	City address.
Wilbur, Elizabeth Sabrina, A.&S.	D. C.	2107 S Street.
Wilcox, Edward L., A.&S.	D. C.	1221 B Street, N. E.
Wilhelm, Robert Mason, A.&S.	Md.	1845 Calvert Street.
Willard, Nana B., A.&S.	D. C.	623 M Street.
Williams, Edith Arvonia, A.&S.	D. C.	3512 11th Street.
Williams, Francis Edgar, C.P.S.	D. C.	The Ontario.
Williams, George Elmer, C.P.S.	Minn.	721 3rd Street.
Williams, G. Ellis, A.&S.	Md.	50 R Street, N. E.
Willis, Elsie Virginia, A.&S.	D. C.	1832 Biltmore Street.
Wills, R. Mayo, Eng.	Va.	318 New York Ave.
Wilson, Joseph H., Eng.	Pa.	1728 15th Street.
Wilson, Elizabeth, A.&S.	Ind.	The Balfour.
Wilson, Laurance Norton, A.&S.	Idaho.	2331 1st Street.
Wilson, Margaret Posey, A.&S.	D. C.	219 1st Street, N. E.
Wilson, Ralph, C.P.S.	Md.	1414 F Street.
Wingate, Wilmer L., C.P.S.	D. C.	2423 18th Street.
Winter, Jean Grace, A.&S.	Okla.	1002 Pa. Ave. S. E.
Woelper, Willard, C.P.S.	D. C.	Dumbarton Court.
Wong, Ung Ce, A.&S.	China.	1418 L Street.
Wood, Frank C., C.P.S.	Mo.	Y. M. C. A.
Woodward, Ester Rittenhouse, T.C.	D. C.	125 New York Avenue.
Woodward, Francis Albert, Eng.m.	D. C.	2248 Ontario Road.
Worrell, Everil Florence, A.&S.	D. C.	1105 Clifton Street.
Worster, Louise, A.&S.	D. C.	942 B Street, S. W.
Wright, R. Claude, A.&S.	D. C.	1440 Meridian Place.
Wu Ying, A.&S.	China.	2415 20th Street.
Yoder, Bertha Alice, T.C.	D. C.	144 11th Street, S. E.
Yoder, Bessie Lee, T.C.	D. C.	144 11th Street, S. E.
Yost, Elsie May, A.&S.	D. C.	1002 Pa. Ave. S. E.
Zielinski, Carl Maria von C.P.S.	Germany.	1706 F Street.
Zinssmeister, Grace Mary, T.C.	D. C.	1364 Girard Street.
Zirkin, Maie, A.&S.	D. C.	821 14th Street.
Zusman, Samuel, A.&S.	N. Y.	327 D Street, S. W.

Summary.

GRADUATE STUDENTS:			
Students in attendance	6		
Candidates for C.E. degree	4		
Candidates for E.E. degree	2		
Candidates for M.E. degree	2		
Candidates for M.S. degree	9		
Candidates for M.A. degree	18		
Candidates for Ph.D. degree	36		
	77		
Duplicate	1		
			76
UNDERGRADUATE STUDENTS:			
Columbian College:			
Candidates for A.B. degree	183		
Candidates for B.S. in Chem. degree	40		
Special	107		
Auditors	5		
		335	
College of Engineering and Mechanic Arts:			
Candidates for B.S. in Arch. degree	3		
Candidates for B.S. in C.E. degree	64		
Candidates for B.S. in E.E. degree	24		
Candidates for B.S. in M.E. degree	21		
Special	40		
		153	
College of Political Sciences:			
Candidates for A.B. degree	26		
Candidates for M.Dip. degree	10		
Special	54		
Auditors	1		
		91	
Teachers College:			
Candidates for A.B. degree and Teachers' Diploma.	72		
Candiates for Teacher's Diploma	3		
Special	8		
Auditors	1	84	663
			739
Duplicates			6
			733

PROFESSIONAL DEPARTMENTS

DEPARTMENT OF LAW.

First Year.

Name.	Legal residence.	City address.
Acker, Harold Knowles Lafayette College.	D. C.	913 16th Street.
Ahrberg, William Raymond	N. Y.	1312 Park Road.
Anderson, Paul	Ill.	1307 R Street.
Barton, Walter Elbert University of Colorado.	Ida.	1106 L Street.
Baumgartner, Edgar Foster M.E., 1911, Lehigh University.	N. J.	1321 Irving Street.
Belmont, Arnauld Wilfrid M.A., 1896, B.S., 1898, Montreal Classical College. Ph.D., 1900, McGill University.	D. C.	Wesley Heights, D. C.
Bisson, Louis Alfred Worcester Polytechnic Institute.	Mass.	3011 Georgia Avenue.
Bizzell, James Eustace George Washington University.	D. C.	The Burlington.
Black, Henry George Atkinson Massachusetts Institute of Technology.	Mass.	613 Rock Creek Ch. Rd.
Borland, Paul Raymond A.B., 1910, Washington and Jefferson College.	Pa.	1700 15th Street.
Boughton, George Wilson	D. C.	1424 K Street.
Bowman, Ralph Grantham Depauw University.	Ind.	Y. M. C. A.
Bowman, Ralph McLane C.E., 1909, Cornell University.	D. C.	1440 Meridian Place.
Britton, John	D. C.	1848 Kalorama Road.
Calder, Albert Russell	Pa.	1700 15th Street.
Chamberlin, Arthur Newell	Vt.	The Brunswick.
Chilcote, Samuel S. C	Pa.	250 House Office Bldg.
Clark, Bennett Champ University of Missouri.	Mo.	1509 16th Street.
Clark, Merrell Edward M.E., 1911, Cornell University.	N. Y.	917 19th Street.
Crane, Alpheus Jennings B.S. in E.E., 1903, Purdue University.	D. C.	2930 Thayer St., N. E.
Crews, Chalsia E University of Missouri.	Mo.	1913 North Capitol St.
Cumpston, Jr., Edward Henry M.E., 1909, Cornell University.	D. C.	1613 30th Street.
Daly, Ida May LL.B., 1909, Washington College of Law.	D. C.	1118 R. I. Avenue.
Davis, Ray Osborne	Va.	507 Prince Street, Alexandria, Va.
Downing, Clyde Clayton	Okla.	260 House Office Bldg.
Elkins, Harry Scott	S. D.	1502 Vermont Ave.
Enlows, Harold Franklin	Ill.	1436 Meridian Place.
Evans, Budd	Minn.	The Plymouth.

Name.	Legal residence.	City address.
Fergusson, Jr., Harvey Butler.... A.B., 1911, Washington and Lee University.	N. M.	352 House Office Bldg.
Fitch, William Reed..... George Washington University.	N. D.	Y. M. C. A.
Fletcher, Frederick Dix..... University of Kansas.	Wash.	1106 L Street.
Fraizer, Cecil C..... University of Pennsylvania.	Ind.	1412 Euclid Street.
French, Louis Osborne..... S.B., 1910, Massachusetts Institute of Technology.	Wis.	1712 17th Street.
Freyer, Frank Barrows..... Graduate, United States Naval Academy.	D. C.	The Dresden.
Frost, Arthur Chester..... A.B., 1909, Harvard University.	Mass.	309 House Office Bldg.
Galloway, Andrew Barritt.....	Okla.	903 13th Street.
Garner, Alan Freeman.....	Va.	Victor J. Evans Co., Victor Building.
Gotta, Robert Bond.....	D. C.	1741 Oregon Avenue.
Greenberg, Louis George Washington University.	D. C.	612 N Street.
Greene, James Woodall.....	Md.	1843 Vernon Street.
Handy, William Upshur.....	D. C.	23 8th Street, S. E.
Harding, Arthur Eugene.....	D. C.	Navy Department.
Healy, Joseph Edward..... William and Mary College.	Va.	1104 12th Street.
Hendry, Morgan Leland..... George Washington University.	Md.	406 Evans Building.
Henry, Irbie Clinton.....	Mo.	717 A Street, S. E.
Hernandez, Enrique Dakanay..... B.A., 1904, Ilocana University.	P. I.	1833 K Street.
Heroy, William Bayard..... Ph.B., 1909, Syracuse University.	N. Y.	3030 Newark St., Cleveland Park, D. C.
Howard, Frank Atherton..... B.S. in M.E., 1911, The George Washington University.	Ill.	1733 R Street.
Howell, Luther Maughan..... Agricultural College of Utah.	Utah	1742 P Street.
James, Joseph Pierson..... Leland Stanford University.	D. C.	1504 R Street.
Johnson, Arthur Chilion..... University of Colorado.	Colo.	1814 G Street.
Jones, Carl Curtis.....	Me.	348 Senate Office Bldg.
Katlin, Irving College of City of New York.	N. Y.	1207 6th Street.
Kittredge, Scott Farrow.....	Me.	65 Rhode Island Avenue.
Koester, Paul	D. C.	2110 1st Street.
LaFollette, William Leroy, Jr.... State College of Washington.	Wash.	2006 Columbia Road.
McCawley, Harrison Byington.... A.B., 1910, Drake University.	Iowa	Y. M. C. A.
McMechan, John	Ind.	807 Taylor Street.
Meckley, Robert Byers..... B.S. in E.E., 1908, Pennsylvania State College.	Pa.	1400 Chapin Street.

Name.	Legal residence.	City address.
Neibling, Harold Edmund Cotner University.	Nebr.	2129 F Street.
Nicholson, Vincent DeWitt B.A., 1910, Earlham College.	D. C.	3201 19th Street.
O'Brien, Francis Vincent	N. Y.	1111 13th Street.
Oldsen, Carl H Concordia College.	Iowa	1800 Belmont Road.
Paine, John Gregg A.B., 1909, Wesleyan University.	Pa.	3746 McKinley Street, Chevy Chase, D. C.
Parker, Thomas Eldridge George Washington University.	Mo.	806, The Farragut.
Pipes, Walter Logan George Washington University.	D. C.	1717 S Street.
Read, Raymond Edgar	Mass.	The Brunswick.
Rice, Willis Ballance M.E., 1907, Cornell University.	N. Y.	1647 Lamont Street.
Rubenstein, Samuel	N. Y.	1337 11th Street.
Sanborn, George Allen	Wis.	1303 Fairmont Street.
Sanders, Harold Benthall B.S., 1910, Mississippi Agricultural and Mechanical College.	Miss.	332 E Street, N. E.
Schaeffer, Harrold Christian	D. C.	1843 R Street.
Schneider, Benjamin Bernish B.S., 1910, State College of Washington.	Wash.	1312 Belmont Street.
Shelton, Theodore D	N. C.	2015 Flagler Place.
Simpson, Archer Roberts A.B., 1911, Yale University.	Conn.	1712 17th Street.
Smoot, Harold Reed Brigham Young University. University of Utah.	Utah	2521 Connecticut Avenue.
Spahr, Neal Bradford B.A., 1911, University of Chattanooga.	Tenn.	22 K Street.
Springs, Laertes Pittman	D. C.	2009 I Street.
Stafford, Edward A.B., 1911, Dartmouth College.	D. C.	1725 Lamont Street.
Stainback, Ashley Burnette B.A., 1906, Trinity College, Durham, N. C.	S. C.	1837 Vernon Street.
Steps, Robert Alexander M.E., 1911, Cornell University.	N. Y.	Y. M. C. A.
Stevenson, Charles Stanley Washburn College.	Kan.	921 O Street.
Stone, James Austin B.A., 1910, Swarthmore College.	D. C.	1618 R. I. Avenue.
Tanner, Marion Snow B.A., 1911, University of Utah.	Utah	117 Maryland Ave., N.E.
Trudgian, Andrew Beers University of Pennsylvania.	W. Va.	1509 13th Street.
Van Gunten, Henry Russell University of Pennsylvania.	Pa.	1432 M Street.
Van Wagoner, John D Utah Agricultural College.	Utah	Y. M. C. A.
Weikert, Edward Wilford Ph.B., 1906, Brown University.	Pa.	1823 G Street.

Name.	Legal residence.	City address.
White, Joseph Curtis. A.B., 1911, Bowdoin College.	Me.	320 Maryland Ave., N.E.
Wolfe, Edmund Stanley. The George Washington University.	Md.	American Nat'l Bank.
Woodson, Walter Browne. Graduate, 1907, United States Naval Academy.	Va.	The Brighton.
Woolley, Herbert Elliott. University of Utah.	Utah	The Birmingham.
Wright, Ulysses Wayne. A.B., 1911, Illinois College.	Ill.	1822 H Street.

Second Year.

Alexander, William Morrison. Williams College.	D. C.	1711 Q Street.
Atherton, Ralph Edward. B.S., 1901, Worcester Polytechnic Institute.	Ill.	1223 10th Street.
Babbage, Arthur Wallace. B.A., 1908, State University of Kentucky.	Ky.	1106 L Street.
Barlow, Frank Augustus. A.B., 1910, University of Minnesota.	Minn.	1717 S Street.
Barr, John Lester. A.B., 1910, Harvard University.	D. C.	The Wyoming.
Bower, Frank Albert. M.E., 1910, Cornell University.	N. Y.	Patent Office.
Buck, George Burton.	Md.	Census Office.
Burger, Alfred	Va.	Patent Office.
Calley, Walter England. S.B., 1903, University of Chicago.	Pa.	Patent Office.
Cobb, Victor B.S., 1908, Harvard University.	Va.	Patent Office.
Cohn, Mark Aurel.	Pa.	1124 12th Street.
Coumbe, Edward Celestine. Colorado State Agricultural College.	Wash.	1502 Vermont Avenue.
Cox, John Dee. Southwestern University.	Tex.	4300 Kansas Avenue.
Creekmore, Thomas Leonidas. William and Mary College.	Va.	1502 Vermont Avenue.
Daniel, Robert Todd.	D. C.	3000 Q Street.
Davis, Myron Mathews. S.B., 1909, Massachusetts Institute of Technology.	Me.	1860 Columbia Road.
Deibert, Arthur Hannum.	D. C.	1411 Harvard Street.
Denning, William Ira. George Washington University.	Ga.	4127 9th Street.
Des Jardins, Clarence Bigelow. B.A., 1909, Kalamazoo College.	Mich.	1717 S Street.
Diener, John Astor. B.S. in E.E., 1910, Purdue University.	Ind.	1700 15th Street.
Dunham, Harry E. E.E., 1906, Syracuse University.	N. Y.	1400 Chapin Street.
Fehr, J. Ralph. George Washington University.	Ill.	1717 S Street.
Feldman, Peter Royal. George Washington University.	Wis.	Navy Department.

Name.	Legal residence.	City address.
Finley, David Edward, Jr. B.A., 1910, University of South Carolina.	S. C.	1219 Conn. Avenue.
Geiman, Daniel J. Virginia Polytechnic Institute.	Va.	1824 N. H. Avenue.
Gibbon, Charles Hugh. University of Wisconsin.	Wis.	"The La Grande."
Hahn, Frederick Ansley. Washington and Lee University.	D. C.	301 Colorado Bldg.
Hanna, Forest Walker. B.A., 1909, Northwestern University.	Mo.	1811 G Street.
Harding, Harvey Almon. Northwestern University.	Nebr.	1739 Park Road.
Hawley, Luther W. B.S., 1908, Worcester Polytechnic Institute.	Vt.	Patent Office.
Heitmuller, George Roeder. George Washington University.	D. C.	1307 14th Street.
Henderson, Robert. Graduate, 1902, United States Naval Academy.	D. C.	1601 23d Street.
Hinton, Sebastian. A.B., 1909, Princeton University.	D. C.	The Chalfonte.
Hubbard, Elliott S.	N. Y.	Gov't Printing Office.
Hunter, William Boyd. B.S., 1897, A.M., 1898, University of Nebraska.	Nebr.	Bureau of Corporations.
Isom, James Rudolph. University of Arkansas.	Ark.	933 K Street.
Jackson, Edwin Roy. B.S., 1904, State University of Iowa.	Iowa	4322 14th Street.
Jeffrey, Frank Rumer. George Washington University.	Wash.	1502 Vermont Avenue.
Johnson, Robert. George Washington University.	Mo.	1219 Conn. Avenue.
Kennedy, George Henry, Jr. B.S. in M.E., 1910, University of Pennsylvania.	D. C.	Patent Office.
Kirley, Grover Cleveland. A.B., 1909, Amherst College.	Mass.	1623 Park Road.
Knowlton, Morris Willson.	Me.	4432 Kansas Avenue.
Krogstad, Robert Bacon. Cornell University.	D. C.	1524 K Street.
Landers, Maurice Birdsall. A.B., 1903, Hamilton College. S.B., 1905, Massachusetts Institute of Technology.	N. Y.	1489 Newton Street.
Larson, William Ludwig.	S. D.	1700 15th Street.
Libby, Warren Edgar. A.B., 1909, Bates College.	Me.	1303 P Street.
McKibbin, George Baldwin. A.B., 1909, Iowa Wesleyan College.	Iowa	102 B Street, N. E.
Mapes, Carl Anthony.	Mich.	1338 Newton Street.
Mascolo, Eduard. George Washington University.	Conn.	221 1st Street.
Moore, Maurice Malcolm. George Washington University.	Mich.	1869 Columbia Road.
Moore, Rawles.	Ky.	1700 15th Street.
Morrison, William Lester. George Washington University.	Mass.	1224 13th Street.

Name.	Legal residence.	City address.
Moses, William Henderson. Brighton College.	D. C.	11th and F Streets.
Nixon, Cleon Robert B.S., 1909, Shurtleff College.	Ill.	209 A Street, S. E.
Ogilby, Chas. F. Randolph, Jr.	D. C.	1416 F Street.
Otto,, Arnold Clarence. Lawrence College. George Washington University.	Wis.	1717 S Street.
Philbrick, Francis Samuel. B.S., 1897, M.A., 1899, University of Nebraska. Ph.D., 1902, Harvard University.	N. Y.	2339 18th Street.
Philips, Charles K. A.B., 1909, Princeton University.	N. J.	1627 Lamont Street.
Preston, Neil DeForest. M.E., 1908, Cornell University.	N. Y.	1824 California Street.
Rodgers, Robert Elmer.	Texas	316 C Street.
Roller, Harry F. A.B., 1906, University of Kansas.	Kans.	1201 Q Street.
Rose, Claude Custer. M.E., 1905, Ohio State University.	Ohio	115 R Street, N. E.
Samsel, Albert Charles. B.A., 1910, Maryville College.	Tenn.	6 Grant Place.
Schantz, Leroy Christian. B.S. in E.E., 1908, Iowa State College.	Iowa	Y. M. C. A.
Sheppard, Ronald Willmot.	N. J.	1839 Munroe Street.
Smith, Charles Watson. University of Chicago.	Pa.	315 H Street.
Smith, Frank Brown. Calvert Hall College.	Md.	1318 12th Street.
Smith, Frank Seymour. B.A., 1910, Wesleyan University.	D. C.	1631 16th Street.
Stottle, Burr Shearer.	Mo.	Y. M. C. A.
Straw, Charles Alonzo Jr. A.B., 1901, Harvard University.	Mass.	3014 Dent Place.
Strong, William Jr. Princeton University.	D. C.	1208 18th Street.
Stuart, Ralph Richard. State University of Iowa.	Iowa	3000 Q Street.
Tolbert, James Ora.	Iowa	Y. M. C. A.
Walker, Clarence Stevens. A.B., 1904, Harvard University.	Mass.	Patent Office.
Waters, Joseph Henry. B.S. in E.E., 1910, The George Washington University.	D. C.	3227 11th Street.
Wenderoth, Ernest Ferdinand. B.S. in E.E., 1910, The George Washington University.	N. Y.	Patent Office.
White, Hubert Shadrach. Eastern College.	Va.	1128 6th Street.
Wilson, Irving Thomas. George Washington University.	Md.	Somerset, Bethesda, Md.
Woodman, William Hidden. B.S., 1908, Dartmouth College.	N. J.	1933 Calvert Street.
Young, Earl	Minn.	727 13th Street.
Zacharias, Robert Mathias. A.B., 1907, Franklin and Marshall College.	Pa.	1717 S Street.

THIRD YEAR.

Name.	Legal residence.	City address.
Andersen, Charles University of Nashville. University of Chicago.	Texas	1007 13th Street.
Baer, David Alphonse. B.A., 1910, The George Washington University.	D. C.	1860 Columbia Road.
Baldwin, Asa Columbus. A.B., 1908, Western Reserve University.	Ohio	135 A Street, N. E.
Barber, Azro Lucien. A.B., 1907, Syracuse University.	N. Y.	1502 Vermont Avenue.
Bickel, Harvey Cleveland	Pa.	Y. M. C. A.
Bond, Eugene Webster George Washington University.	Ill.	1306 O Street.
Brookes, John St. Clair, Jr. A.B., 1907, M.A., 1910, The George Washington University.	D. C.	1525 Corcoran Street.
Bullion, Clarence Leroy	Ohio	4434 Kansas Avenue.
Burns, Walter William M.E., 1906, Cornell University.	N. Y.	518 Shepherd Street.
Butler, Comfort Straight A.B., 1909, University of Illinois.	Ill.	The Brunswick.
Callister, Edward Richard	Utah	Ventosa Apartments.
Cox, Henry Aubrey	Tenn.	1502 Vermont Avenue.
Crowell, William Butterworth	Ohio	1600 Park Road.
Davis, Max Warburton M.E., 1908, Cornell University.	Conn.	2518 17th Street.
Davis William Edward A.B., 1907, Western Maryland College.	Md.	1226 11th Street.
Denman, Charles Arthur	Nebr.	604 C Street, N. E.
DeWolf, Richard Crosby Massachusetts Institute of Technology.	Mass.	321 Maryland Ave., N.E.
Dodge, Parker Van Patten S.B., 1907, Massachusetts Institute of Technology.	D. C.	134 B Street, N. E.
Dunlop, Walter Grafton B.S., 1909, Princeton University.	D. C.	The Cordova.
Dutton, Clarence Benjamin	Mass.	1331 Belmont Street.
Eickhoff, Theodore Henry B.S. in E.E., 1908, Purdue University.	Ind.	1922 16th Street.
Fornaris, Fernando Braulio University of Virginia.	P. R.	1419 Clifton Street.
Fraser, William Wright A.B., 1905, New Windsor College.	Md.	Patent Office.
Galleher, Parke Ashby University of Pennsylvania.	D. C.	3226 13th Street.
Gerard, Charles Wesley A.B., 1906, Ohio State University.	D. C.	2212 Flagler Place.
Gerhart, Herbert Benjamin	Pa.	1822 H Street.
Gill, Walter Josiah, Jr. S.B., 1904, Massachusetts Institute of Technology.	Mass.	Patent Office.
Glover, Charles Carroll, Jr. B.A., 1910, Yale University.	D. C.	1703 K Street.
Goode, Philip Burwell A.B., 1907, Harvard University.	D. C.	Patent Office.

Name.	Legal residence.	City address.
Gordon, Spencer A.B., 1909, Princeton University.	D. C.	3028 Q Street.
Guptill, Leon Clifton B.A., 1909, Colby College.	Me	23 1st Street, N. E.
Hawley, Charles Taft B.S., 1898, M.E., 1908, Worcester Polytechnic Institute.	Mass.	Patent Office.
Helms, Birch B.A., 1909, Yale University.	Pa.	Union Trust Building.
Herman, Morris D.	Minn.	1312 Belmont Street.
Hilton, Charles Vanderbilt	Md.	2809 N Street.
Hoover, Frank Willard	D. C.	1824 16th Street.
Hoover, Joseph Raymond Lafayette College. George Washington University.	D. C.	Hibbs Building.
Houston, William Cannon, Jr.	Tenn.	House Office Building.
Hudson, Douglas Granville	Kans.	1843 Vernon Street.
Humason, Harris Monroe A.B., 1909, Yale University.	Conn.	1445 Mass. Avenue.
Hynson, Richard Washburn Washington and Lee University.	D. C.	1335 N Street.
Johnson, Elbert Culbreth LL.B., 1910, Valparaiso University.	Wash.	The Royalton.
Kause, Arthur John	D. C.	1905 Jackson St., N. E.
Koeppler, John Louis	Wis.	Headquarters, U. S. Marine Corps.
Kunkel, Frederick Eugene	Pa.	1717 S Street.
Lamb, William Ers B.S., 1909, Dartmouth College.	D. C.	1322 I Street.
Lazarus, I. Burt	Mass.	2026 F Street.
Lillie, Ray Dudley A.B., 1904, University of Michigan.	Mich.	1429 N. Y. Avenue.
Lilly, Scott Henry B.A., 1897, Cornell College.	Iowa	131 Maple St., Takoma Park, D. C.
Lindeman, Clarence Albert	Cal.	1226 11th Street.
Long, Franklin Samuel Valparaiso University.	Ill.	2206 Flagler Place.
Macfarland, Horace Greeley Graduate, 1891, United States Naval Academy.	D. C.	1727 F Street.
Mechlin, Ernest Frederick B.S., 1907, The George Washington University.	D. C.	Patent Office.
Miller, Herman B.S., 1898, Nebraska Wesleyan University.	Nebr.	Patent Office.
Miller, Lawrence A. Gale A.B., 1908, Harvard University.	Mass.	Patent Office.
Moakley, Harry Joseph Ph.B., 1908, Yale University.	Conn.	1860 Columbia Road.
Momsen, Richard Paul	Wis	271 House of Representatives.
Moore, James Ballard	D. C.	1869 Columbia Road.
Munden, Ralph M.E., 1906, Cornell University.	Pa.	Patent Office.
Myers, John Dashiell	D. C.	1634 Riggs Place.

Name.	Legal residence.	City address.
Nairn, William Wallace, Jr.	D. C.	901 Lawrence St., N. E.
Nettleton, Leigh Lanman. University of Utah.	Utah	1822 H Street.
Newhouser, Roy Lyman Joseph. B.A., 1909, The George Washington University.	D. C.	1707 21st Street.
Oberlin, John Jay. A.B., 1901, Washington and Lee University.	Md.	Patent Office.
Packard, Roscoe Milliken. A.B., 1899, M.A., 1900, Western Reserve University.	D. C.	Patent Office.
Palais, Maurice	Mass.	149 A Street, N. E.
Patterson, Matthew Waren	Ark.	Dept. of Agriculture.
Peck, George Curtis Stanley. Notre Dame University. George Washington University.	D. C.	House Office Building.
Rowland, Guy Edwin	Texas	1483 Newton Street.
Rush, Clifford Alvin	Kans.	Y. M. C. A.
Scanlon, Tom	S. D.	1700 15th Street.
Schnare, Lester Llewellyn	Ga.	Y. M. C. A.
Schreiber, Ernst Otto, Jr. B.A., 1910, The George Washington University.	D. C.	642 E Street, N. E.
Shaw, Paul James	Pa.	Y. M. C. A.
Sheppard, Carl Dunkle. Ph.B., 1902, Ohio University.	Ohio	Florence Court.
Smith, Jesse Bond	D. C.	Bureau of Corporations.
Smith, St. Clair	S. D.	1700 15th Street.
Sutton, Loyd Hall. S.B., 1908, Massachusetts Institute of Technology.	Mass.	1323 Clifton Street.
Townsend, Wilson Lewis	D. C.	Kensington, Md.
Walker, John Earl. B.S., 1907, Kalamazoo College. B.S., 1907, University of Chicago.	Mich.	1012 15th Street.
Watkins, Elton	D. C.	1004 11th Street.
White, Richard Franklin. A.B., 1910, The Tulane University of Louisiana.	La.	Senate Office Building.
Zeh, Henry William	D. C.	1357 Harvard Street.
Zirkle, Joseph Claiborne. The George Washington University.	Va.	635 F Street.

Master of Laws.

Davenport, Lewis Howard. LL.B., 1910, The George Washington University.	N. Y.	Chevy Chase, D. C.
Hampton, Wade Bruce. B.A., 1909, M.A., 1910, LL.B., 1910, Wake Forest College.	N. C.	1715 N Street.
Sanderlin, George Bismark. A.B., 1899, A.M., 1900, Wake Forest College. LL.B., 1908, M.P.L., 1910, The George Washington University.	N. C.	509 4th Street.

Master of Patent Law.

Name.	Legal residence.	City address.
Babcock, Richard Earle	D. C.	707 G Street.
LL.B., 1911, The George Washington University.		
Burgess, Newton Albert	Ala.	McLachlen Building.
B.S. in E.E., Alabama Polytechnic Institute. LL.B., 1911, National University Law School.		
Dahn, Franz Frederick William	Minn.	1502 Vermont Avenue.
B.S., 1909, LL.B., 1911, The George Washington University.		
Garrett, George Everett	Va.	Patent Office.

Special.

Barrows, Frank Elisha	Me.	738 Rock Creek Ch. Rd.
LL.B., 1911, National University Law School.		
Briggs, Stanford	Me.	Sigma Chi House.
Culbertson, William Smith	Kans.	The Woodward.
B.A., 1907, College of Emporia. B.A., 1908, Yale University.		
Davis, Meyer	D. C.	1201 Morse Street, N. E.
Dow, William John	Mo.	2020 N. Capitol Street.
Farmer, James Price	D. C.	154 A Street, N. E.
Gerhart, Herbert Benjamin	Pa.	1822 H Street.
LL.B., February 1912, The George Washington University.		
Giss, Richard, Louis	Wash.	1104 L Street.
Grove, Selbie D	Mich.	1332 B Street, S. E.
LL.B., 1911, Georgetown University.		
Haynes, Delos Garriott	Ill.	Patent Office.
B.S., 1909, Massachusetts Institute of Technology. LL.B., 1911, National University Law School.		
Hemrich, Ernest Edward	Wash.	1100 Vermont Avenue.
Humphreys, William Yerger	Miss.	House Document Room.
Hunt, John Stuart	Tex.	1100 Vermont Avenue.
LL.B., 1910, National University Law School.		
Lerch, John George	D. C.	1520 M Street.
Millenson, Joseph	Pa.	1024 17th Street.
Miller, William Cammack	D. C.	Woodlawn, Cleveland Park, D. C.
B.A., 1911, Yale University.		
Pilcher, Dalton Jefferson	D. C.	216 G Street, N. E.
Pomeroy, Eugene C	N. Y.	The Dresden.
Princeton University.		
Purdy, Henry Klugh	S. C.	514 East Capitol Street.
Reif, Charles Caleb	Ohio	2620 13th Street.
M.E., 1906, Ohio State University. LL.B., 1911, Georgetown University.		
Rust, Breckenridge Cabell	D. C.	McGill Building.
Saum, Hugh Harris	D. C.	3311 Newark Street.
Scott, Foster Clyde	Ill.	1338 Newton Street.
Shaw, Kenneth Augustine	Mo.	638 5th Street, N. E.
LL.B., 1908, LL.M., 1909, Georgetown University.		
Shaw, Franklin Denwood	Pa.	1419 Chapin Street.

Name.	Legal residence.	City address.
Sinclair, Beverly Kennon	Va.	W. B. Hibbs & Co.
Smith, Charles Perley A.B., 1902, Brown University.	Mass.	528 Sheperd Street.
Smith, George Walter	Pa.	1700 15th Street.
Spencer, William Boyd	Pa.	519 L Street.
Steward, Roy Franklin LL.B., 1911, National University Law School.	D. C.	822 Kennedy Street.
Thomas, Joseph Neer	Ill.	1439 R. I. Avenue.
Warfield, Robert LeRoy	Md.	Rockville, Md.
Watson, Paul Herbert	Kans.	1322 Kearney St., Brookland, D. C.
Whitney, Mark L	N. Y.	1349 Mass. Avenue.
Williams, Francis Edgar Cornell University.	D. C.	The Ontario.
Willis, George Bullock	Va.	R. F. D. No. 3, Alexandria, Va.
Wilmer, Joseph Allison	Md.	3117 N Street.
Winkelhaus, William August	Ill.	4226 8th Street.
Wright, Hamilton	Mont.	1722 F Street.

REVIEW.

Anderson, John Henry LL.B., 1906, National University Law School. M.P.L., 1907, The George Washington University.	Ohio	2110 Flagler Place.
Finkelstein, Henry Charles LL.B., 1904, The George Washington University.	D. C.	Union Trust Building.
Kemmerer, Charles Tilghman Ph.B., 1903, State University of Iowa. LL.B., 1905, University of Michigan.	Iowa	The Newry.

Summary.

CANDIDATES FOR LL.B. DEGREE:	
First year	93
Second year	81
Third year	84
Total	258
CANDIDATES FOR LL.M. DEGREE	3
CANDIDATES FOR M.P.L. DEGREE	4
SPECIAL	39
REVIEW	3
	307
DUPLICATES	1
Total	306

DEPARTMENT OF MEDICINE.

Doctor of Medicine.

First Year.

Name.	Legal residence.	City address.
Barnes, Forrest Price	Ohio	Casualty Hospital.
Basil, John William	Md.	937 K St., N. W.
Bingman, Carroll E.	Pa.	601 M St., N. W.
Bolton, Boyce Richardson	D. C.	3104 P St., N. W.
Bost, Thomas Creasy	N. C.	721 3d St., N. W.
Bradley, Jeter Carroll	N. C.	926 K St., N. W.
Castro, George Charles C.	Porto Rico.	226 North Capitol St.
Chamberlin, Frank Tenny	D. C.	1323 M St., N. W.
Craig, Ernest Arthur	Ill.	1228 Mass. Avenue.
Dempf, Martin Anthony	D. C.	13 4th St., N. E.
Donn, Frederick Y., Ph.D., Ph.C.	D. C.	1544 New Jersey Ave.
Fitzhugh, Clark Seals	D. C.	124 12th St., S. E.
Gentzkow, Cleon Joseph	Minn.	The Clifton, Apt. 2.
Gill, William Tignor, Jr.	D. C.	442 M St., N. W.
Green, Eric Steel	N. Y.	916 15th St., N. W.
Kenner, Albert Walton, Phar.D.	D. C.	1711 17th St., N. W.
Lear, Joseph	Conn.	G. W. U. Hospital.
Ligon, John Fulton	D. C.	135 13th St., N. E.
McNally, Thomas Henry, Jr.	R. I.	The Cumberland Apt.
McCray, Arthur Howard B.S.C., D.V.M.	Ohio	1322 Vermont Ave.
McClaren, James	Pa.	Y. M. C. A.
Marino, Charles George	N. Y.	The Alabama Apt.
Peters, David B.	Va.	Gov't Hospital for Insane
Putzki, Paul Stirling	D. C.	1862 California St.
Rosenblum, Howard	N. Y.	1103 H St., N. W.
Rowlson, Ira Alonzo	N. Y.	1215 K St., N. W.
Thompson, Richard Knight	D. C.	484 Maryland Ave., S.W.
Witten, Louis J.	N. Y.	Geo. Wash. University.
Williams, V. Blackstone	D. C.	3318 Reservoir Place.

Second Year.

Barger, Gervase James P.	Neb.	1104 15th St., N. W.
Bloom, Rudolph	Va.	Arlington, Va.
Downing, Perley Edwin	N. H.	3910 8th St., N. W.
Field, Fay	Pa.	1215 K St., N. W.
Harrison, Forrest Martin	Va.	818 A St., S. E.
Jova, Andrew Martin	Cuba	939 H St., N. W.
Kreitzer, James Graydon	Pa.	1435 9th St., N. W.

Miller, Thomas, Jr.....D. C. 1616 7th St., N. W.
Morris, Forrest V.....Okla. 3910 8th St., N. W.
Passer, William Frederick, Ph.C..Minn. Children's Hospital.
Sze, Tsannyoen Philip China 2750 14th St., N. W.
Supplee, Eugene Deyerle.....D. C. 311 A St., N. E.
Taylor, Chase D. C. 1433 Belmont St.
Vaccaro, Leopold N. Y. 5th and F Sts., N. W.

Third Year.

Name.	Legal residence.	City address.
Dimond, Harry Alfred	Conn.	821 13th St., N. W.
English, Merton Alden	D. C.	1758 Park Road.
English, Leonard H	Pa.	1215 K St., N. W.
Fortier, Roy McLeay	Cal.	2310 19th St., N. W.
Henneberger, Josiah Baker	Md.	Casualty Hospital.
Riley, Albert Austin	Ohio	1375 Columbia Road.
Shea, George Marvin Waite	Conn.	3210 19th St., N. W.
Stout, Joseph Duerson, A.B	D. C.	1435 9th St., N. W.
Turner, May, M.S., B.S	D. C.	453 Irving St., N. W.

Fourth Year.

Bailey, William Otis S. C. 1215 N St., N. W.
Borden, Daniel LeRay.....D. C. Columbia Hospital.
Brewer, Gilbert Roscoe Ill. 1312 23d St., N. W.
Bricker, William Henry, Jr.....N. J. 1215 K St., N. W.
Bricker, Sacks D. C. 200 15th St., S. E.
Buck, George Henry Maine Geo. Wash. University.
Burgess, True S.....Ark. 734 12th St., N. W.
Burnett, Roy E., B.S.....Okla. 1322 Vermont Ave.
Calver, George Wehnes.....D. C. 207 A St., S. E.
Castell, Louis B., B.S., Phar.D....D. C. 1132 6th St., N. W.
Corbett, Sewall Munson.....Va. Arlington, Va.
Cram, Albert M.....Vt. 1611 13th St., N. W.
Dyer, John C.....Ohio 112 Tennessee Ave., N.E.
Eckhardt, John Carl.....D. C. 1140 18th St., N. W.
Ellison, Everett M., A.B., A.M...Tenn. Garfield Hospital.
Fisher, Charles A.....Pa. 1307 R St., N. W.
Fitz-Hugh, William DeHart.....Va. Tuberculosis Hospital.
Gray, Augustus Clagett Md. Sibley Hospital.
Hall, Custis Lee.....D. C. 1408 Chapin St., N. W.
Hunter, Oscar Benwood Va. 1305 22d St., N. W.
Hunt, Isaac Burton Tenn. 1422 N St., N. W.
Kane, Howard F., A.B.....Maine G. W. U. Hospital.

Knott, Charles O.....Va. 1006 Eye St., S. E.
Landis, Charles Caldwell.....Cal. 1611 13th St., N. W.
LaGarde, Louis Anatole, Jr.....D. C. 2624 Woodley Place.
Leonard, George Ferree, A.B.....N. C. 813 12th St., N. W.
Luckett, George Sparr, A.B.....Va. The Rochambeau Apt.
Martin, Aaron Wise Va. 1833 K St., N. W.
Milburn, Frank W., Phar.D.....D. C. Garfield Hospital.
Mooers, Harold Alonzo.....D. C. Takoma Park, D. C.
Pagan, Albert Elwood.....D. C. 1965 Biltmore St.
Pitt, Richard V.....Va. 30 Randolph Place, D. C.
Ralph, Charles Edward Ill. 1422 N St., N. W.
Read, Effie A., Ph. D.,A.B.,A.M...Mass. 1332 Eye St., N. W.
Read, Boyd Richard D. C. Emergency Hospital.
Rollings, John Adolph W. Va. G. W. U. Hospital.
Schaub, Gustavus Adolphus.....Texas Homeopathic Hospital.
Scarito, Nicholas Julius.....D. C. Francis Apartment.
Sloat, Jesse Irving D. C. 23 First St., N. E.
Whitaker, Jay Atwood, B.A.....Iowa Garfield Hospital.

Summary.

First Year	29
Second Year	14
Third Year	9
Fourth Year	40
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DEPARTMENT OF DENTISTRY.

First Year.

Name.	Legal residence.	City address.
Beebe, Ira Dow	Conn.	1020 9th Street.
Bonseigneur, Camille Robespierre	D. C.	1311 E Street.
Craig, James Stephen	Ore.	409 East Capitol Street.
Danemann, Samuel	D. C.	439 9th Street.
Davis, Albert Wendell	D. C.	218 F Street, N. E.
Donald Callar	Va.	418 Bond Building.
Forbes, William E	D. C.	1334 Monroe Street.
Gardner, Albert P	N. Y.	U. S. Naval Med. School.
Gidley, Harley Jeffers	N. Y.	801 12th Street.
Ginsberg, Samuel B	D. C.	1601 12th Street.
Golden, Edward Earl	Wyo.	1720 Newton Street
Hagen, Walter L	N. Y.	501 2nd Street, N. E.
Haywood, Markley R	N. Y.	Bureau of Standards.
King, Frank Collin	Canada	603 Howard Place.
King, Mansfield Venable	Va.	1323 F Street.
Lowry, Henry Clay	Pa.	1325 H Street.
Mead, Sterling Vernon	Kans.	206 12th Street, S. E.
Normyle, John A	Mass.	523 11th Street.
Prendergast, Benj. Franklin	D. C.	465 G Street.
Rice, William Isaac	W. Va.	214 8th Street, S. W.
Roberts, Jasper Newton	Tenn.	517 B Street, N. E.
Robertshaw, George Laws	Ill.	1477 Newton St., Apt. 4.
Scala, Norman B	D. C.	918 S. Carolina Av., S. E.
Schmidt, Carl Heisler	Mass.	1741 G Street.
Walls, Harry Ernest	Ga.	148 N. Carolina Av., S. E.
Walze, Carl W	Md.	253 12th St., S. E.
White, Douglas Alfred	Mass.	112 Fourth St., S. E.

Second Year.

Achsan, Samuel Charles	N. Y.	1325 H Street.
Alley, Edward Crawford	Ky.	1710 F Street.
Briggs, Elmer E	Pa.	1419 Ames Place, N. E.
Durfee, Claude	Ill.	3501 14th Street.
Eisenstein, Nathan	D. C.	825 Vermont Ave.
Fansler, Orville Newton	Md.	Bethesda, Md.

Hardester, John S.....D. C.....912 I Street.
Hogan, Arnold Wilbur.....Va. 929 G Street.
Maphis, Carl Burdette.....Va. 829 Randolph Street.
Marstella, John P.....Ill. 20 Quincy Place.
Rich, Charles W.....Pa. 1006 K Street, N. E.
Silliman, Walter Brittin.....Pa. 915 New York Ave.
Spillan, Henry Merle.....N. Y.....1319 Fairmont Street.
Williams Edward.....N. Y.....3025 11th Street.

THIRD YEAR.

Angelo, Stuart Miller.....Va. 1108 L Street.
Bingman, Harry.....Pa. 617 Morris St., N. E.
Camalier, Caleb Willard.....D. C.....28 Quincy Pl., N. E.
Fowler, Robert Clinton.....D. C.....710 10th Street, S. E.
Fradkin, Leon H.....Russia 933 H Street.
Michaels, Melicu Manly.....S. C.....624 G Street, N. E.
Rubira, Angel Alfredo D.....S. A.....934 14th Street.
Ph.D., 1906, Colegio National Vicente Rocafuerte.
White, George Elwood.....Mass 1108 L Street.
Zepp, Washington Clarence... N. J.....Ogram's Drug Store, 13th & Pa. Ave.
Ph.G., 1904, Meico-Chisurgical College.

Summary.

First Year	27
Second Year	14
Third Year	9
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NATIONAL COLLEGE OF PHARMACY.

FRESHMAN CLASS.

Name.	Legal residence.	City address.
Adams, Joseph Granville	Va.	Falls Church, Va.
Adams, William S.	D. C.	713 16th Street, N. E.
Avrutin, Robert	Russia	1204 7th Street.
Bayne, Thomas Albert	Va.	207 S. Fairfax Street, Alexandria, Va.
Biggr, John G.	D. C.	621 Irving Street.
Blackiston, Beulah Lanette	D. C.	1110 6th Street.
Boyd, Francis Cornelius	D. C.	121 2nd Street, N. E.
Burgher, Vincent Alcis	N. J.	1304 Park Road.
Carroll, John Mortimer	D. C.	1442 Florida Avenue.
Crisp, Thomas Benton, Jr.	D. C.	638 E Street, N. E.

Donohoe, Walter J. A.....N. Y.....1808 1st Street.
Donahue, T. Francis.....D. C.....3345 P Street.
Fink, James Albert.....D. C.....1826 15th Street.
Hall, Earle Richardson.....Iowa.....1333 Columbia Road.
Heller, Theodore John.....D. C.....740 7th Street, S. E.
Kimball, Clarence Victor.....N. C.....1850 Park Road.
Koss, Flavelle E.....D. C.....1814 Calvert Street.
Lantz, Samuel Aaron.....Va.....520 3rd Street.
McCambridge, Joseph Austin....D. C.....604 22nd Street.
Malone, William Wallace.....D. C.....305 Penn. Avenue, S. E.
Minkin, Abraham J.....Russia.....1501 1st Street.
Moose, George Kelley.....N. C.....2140 N Street.
Murphy, John Allen.....Pa.....301 Penn. Avenue, S. E.
LL.B., 1909, Georgetown University.
Petitt, Robert F.....D. C.....127 Heckman St, S. E.
Rosenberg, Louis Charles.....Conn.....709 P Street.
Shope, Raymond P.....D. C.....637 Maryland Ave., N. E.
Snyder, Frank Joseph.....Ark.....1000 24th Street.
Stephens, William Andrew.....Ky.....831 North Capitol Street.
Weil, Albert.....D. C.....Alexandria, Va.

Junior Class.

Boyd, William Armstrong.....D. C.....2901 Georgia Avenue.
Chamblin, Ralph V.....Va.....Herndon, Va.
Dudley, Frederick Edwin, Jr.....D. C.....Takoma Park, D. C.
Kinsey, Raymond Daniel.....D. C.....459 G Street, S. W.
Kloczewski, Albert Marian.....D. C.....500 9th Street.
Maxwell, David Lander.....Tenn.....21st and G Streets.
Mix, Anna Elizabeth.....Md.....113 Maryland Ave., N. E.
Snider, Clyde E.....Kans.....24th and E Streets.
Tennyson, Irving A.....Va.....Alexandria, Va.
Umhau, John William.....D. C.....731 10th Street, S. E.
Wight, F. Leslie.....Va.....1008 F Street, N. E.
Wiley, Clarence Harvey.....Va.....1322 U Street.
Whitley, Lawrence B.....N. C.....26 Q Street.
Whittlesey, Wm. Henry Jr.....Ohio.....3407 Holmead Place.

Senior Class.

Anderson, Grace Levering.....Mo.....1801 Wyoming Avenue.
Barker, Charles W.....Md.....Rm. 322 P. O. Dept.
Dammeyer, Christian F. W., Jr...Md.....11th and East Capitol Sts.
Day, Harold Lewis.....D. C.....1241 Euclid Street.
Elliott, Edna Taylor.....Mich.....1320 Mass. Ave., N. E.
Grubbs, Lindley Roy.....Md.....76 I Street.
Henry, Columbus Washington...N. C.....22nd and N Streets.

Hohberger, Samuel James.....Md.....35 Q Street, N. E.
Morgan, Malcolm Ward.....D. C.....Bethseda, Md.
Norton, William Harrison.....Wash.....136 6th Street, N. E.
Schommer, John B., LL.B.,...Wis.....Union Building.
LL.B., 1907, The George Washington University.
Smyser, Bert Alexander.....Pa.....446 Kentucky Ave., S. E.
Thyson, Leo Cromwell.....D. C.....1366 Columbia Road.

SPECIAL.

Barnett, William Daniel.....Tex.....3845 Davenport Street.
Bury, Irvin Francis.....D. C.....2200 Nichols Avenue.
Embrey, Thaddeus J.....Va.....1215 East Capitol Street.
Evans, Ethel Juliet.....D. C.....The Stafford, Lanier Pl.
Kenner, Edwin Augustus.....D. C.....1711 17th Street.
Mayo, Redmond.....N. C.....1115 5th Street.
Neil, Joseph M.....Pa.....4314 8th Street.
Tschiffely, Claude.....Md.....1207 Conn. Ave.
Valaer, Peter, Jr.....N. C.....421 P Street.
B.S., 1906, North Carolina Agricultural and Mechanical College.
Waldman, Jacob.....Russia.....1353 East Capitol Street.

Summary.

Freshman	29
Junior	14
Senior	13
Special	10
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COLLEGE OF VETERINARY MEDICINE.

FIRST YEAR.

Name.	Legal residence.	City address.
Cashell, Irving M.	Md.	2907 Sherman Avenue.
Chapin, Judson Kerfoot.	Va.	1401 5th Street.
Colflesh, Joseph Harmon.	Pa.	1320 W Street.
Cook, Parley Mere.	Ohio	1303 R Street.
Crawford, Arthur Burdeck.	Mass	1712 15th Street.
Essex, John James.	Md.	Chevy Chase, Md.
Forbes, Samuel Dexter.	Va.	2115 14th Street.
Gantz, Claudius R.	D. C.	1206 D Street.
Getz, Harry Rohrer.	Pa.	1303 R Street.
Hayes, Jesse.	N. J.	1325 New York Avenue.
Kelser, Raymond Alexander.	D. C.	231 14th Street, N. E.
Miller, Howard Sydnor.	Va.	The Fredonia.
Munro, Joseph Briggs.	R. I.	2707 11th Street.
Reynolds, Francois Hue K.	Wis.	240 2nd Street, N. E.

Shillinger, Jacob Edward.....Md. 1330 W Street.
Thigpen, Claude.....Ala. 1303 R Street.
Trigg, William S.....Va. 2116 Flagler Place.
Whitney, Clifford Caswell.....Mass 1128 B Street, N. E.

SECOND YEAR.

Behney, Jacob E.....Pa. 2115 14th Street.
Gillette, George H.....Kans. 26 Iowa Circle.
Grenfell, Frederick A.....D. C.....1916 H Street.
Hargett, Ernest George.....N. C.....310 3rd Street.
Hooker, William Anson.....Mass 1829 G Street.
Lambert, Fred W.....Md. 1321 Florida Avenue.
McLaughlin, Edward J.....Ill. 1400 Chapin Street.
Morcock, Julius E.....Ga. 2115 14th Street.
Nicol, James Buchanan.....Va. 1444 W Street.
Potteiger, Clarence B.....Pa. 1400 Chapin Street.

THIRD YEAR.

Ayers, Admiral Taw.....D. C.....1416 U Street.
Benjamin Frank Herbert.....D. C.....1822 16th Street
Buchanan, Joseph Wesley.....D. C.....901 M Street.
Clayton, Harry Thomas.....Mo. 1430 V Street.
Earl, Warren Becker.....N. Y.....1420 Q Street.
Fake, Charles Thompson.....N. Y.....1427 R Street.
Hicks, Greydon St. Clair.....Mich. Govt. Hosp. for Insane.
Hodge, Joseph Ernest.....Tenn. 1444 W Street.
Holt, Campbell Lloyd.....Texas.....R. 259, War Department.
Lochboehler, Harry Aloysius.....Nebr. 1320 W Street.
McClure, Floyd Ivan.....Pa. 1408 Belmont Street.
McClure, Fred Kussart.....Pa. 1408 Belmont Street.
Marsh, Hadleigh.....D. C.....1882 Monroe Street.
Norris, James Walter.....Md. 1924 17th Street.
Perrin, Edwin Ruthvin.....Mich. 1320 W Street.
Sanchez-Lloveras, Carlos.....Argentina ..2504 14th Street.
Smith, Jesse Karl.....Ariz. 1311 13th Street.
Stahl, Benton Mehrling.....D. C.....312 12th Street, S. W.

Summary.

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GEOGRAPHICAL DISTRIBUTION.

Alabama	7	North Dakota	1
Arizona	2	Ohio	35
Arkansas	4	Oklahoma	9
California	8	Oregon	2
Colorado	4	Pennsylvania	72
Connecticut	11	Rhode Island	4
Delaware	4	South Carolina	9
District of Columbia	490	South Dakota	6
Florida	3	Tennessee	12
Georgia	5	Texas	15
Idaho	2	Utah	11
Illinois	32	Vermont	5
Indiana	16	Virginia	75
Iowa	24	Washington	11
Kansas	14	West Virginia	7
Kentucky	11	Wisconsin	17
Louisiana	3	Wyoming	3
Maine	14	Argentine	1
Maryland	59	Austria	1
Marsachusetts	41	Brazil	1
Michigan	16	Canada	3
Minnesota	17	China	6
Mississippi	6	Cuba	1
Missouri	21	Ecuador	1
Montana	2	France	2
Nebraska	16	Germany	4
New Hampshire	7	Philippine Islands	4
New Jersey	19	Porto Rico	4
New Mexico	1	Russia	6
New York	65	Turkey	1
North Carolina	17		

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GENERAL SUMMARY.

TEACHING STAFF. (In many instances members of the Teaching Staff give only part time to the University):

Professors	65
Associate Professors	11
Assistant Professors	19
Associates, Lecturers, Instructors, Demonstrators, and Assistants	91
Total	186

STUDENTS REGISTERED IN THE UNIVERSITY, 1911-12.

DEPARTMENT OF ARTS AND SCIENCES:		
Faculty of Graduate Studies	76	
Columbian College	335	
College of Engineering and Mechanic Arts	153	
College of the Political Sciences	91	
Teachers College	84	
	739	
Duplicates	6	
		733
PROFESSIONAL DEPARTMENT:		
Department of Law	306	
Department of Medicine	92	
Department of Dentistry	50	
		448
ASSOCIATED COLLEGES:		
National College of Pharmacy	66	
College of Veterinary Medicine	46	
		112
Total		1293
Duplicates		23
Total		1270

DEGREES CONFERRED

DEGREES CONFERRED AT FALL CONVOCATION, 1911.

IN COURSE.

Doctor of Philosophy.

Francis Xavier Zerhusen, Kentucky.
A. B., 1906, Notre Dame University.

Bachelor of Arts.

Tien Yuen Chang, China.
Charles Edward Hiatt, North Carolina.

Master of Laws.

Wade Bruce Hampton, North Carolina.

Master of Patent Law.

Richard Earle Babcock, District of Columbia.
Newton Albert Burgess, Alabama.
Franz Frederick William Dahn, Minnesota.

Bachelor of Law.

John Dashiell Myers, District of Columbia.

Doctor of Medicine.

Hagop Davidian, Asia Minor.
Fujio Mitsuyoshi, Japan.
Timothy Graham Williams, North Carolina.

DEGREES CONFERRED AT WINTER CONVOCATION, 1912.

IN COURSE.

Master of Science.

Philip Castleman, Massachusetts.
B. S., 1906, Harvard University.
M.D., 1911, The George Washington University.

Bachelor of Arts.

Selwyn Kennedy Cockrell, District of Columbia.
George Allen Sanborn, Wisconsin.
Irving Paul Taylor, District of Columbia.

Bachelor of Science in Civil Engineering.

William Curtis Cooley Ball, Delaware.

Master of Patent Law.

George Everett Garrett, Virginia.

Bachelor of Laws.

David Alphonse Baer, District of Columbia.
Henry Aubrey Cox, Tennessee.
Herbert Benjamin Gerhart, Pennsylvania.

Bachelor of Law.

Philip Burwell Goode, District of Columbia.

Doctor of Dental Surgery.

Richard Aronson, New York.

DEGREES CONFERRED AT COMMENCEMENT, 1912.

HONORARY.

Doctor of Laws.

Charles Edward Munroe.
James Brown Scott.

IN COURSE.

Doctor of Philosophy.

Alton Lewin Kibler, Virginia.
A. B., 1904, Randolph-Macon College.
M. S., 1909, The George Washington University.

William John McCaughey, Pennsylvania.
B. S., 1906, University of Pennsylvania.

Master of Arts.

Edith Blinston Lowe, District of Columbia.
A. B., 1911, The George Washington University.

John Owen Rankin, Missouri.
A. B., 1904, Tarkio College.

Master of Arts and Master's Diploma in Education.

Robert Lee Haycock, District of Columbia.
A. B. and Teachers Diploma, 1911, The George Washington University.

Electrical Engineer.

Russell Barker Munroe, District of Columbia.
B. S., 1911, University of Pennsylvania.

Mechanical Engineer.

Roy Franklin Carthy, District of Columbia.
B. S., in M. E., 1911, The George Washington University.

Bachelor of Arts.

Hans Wilhelm Ferdinand Anderson, Germany.
Roger Sherman Gates Boutell, District of Columbia.
Minnie Hulda Brakhagen, District of Columbia.
Edith Katherine Cash, District of Columbia.
(With distinction)
Mabel Louise Chapin, District of Columbia.
Paul Tinsley Cheek, District of Columbia.
Herman Blaney Chubb, District of Columbia.
Mary Veronica Dempsey, New York.
Moncena Miles Dodge, California.
Ralph McNeal Dunbar, Maryland.
(With distinction)
Charles Merritt Earl, Wisconsin.
Walter Scott Eatherly, Tennessee.
Jeanette Geschickter, District of Columbia.
(With distinction)
Walter Edgar Hancock, Texas.
Enid Marian Hobbs, Canada.
(With distinction)
Maude Lillian Jackson, District of Columbia
Ramon I. Janer, Porto Rico.
Eleanor Isabelle Jones, District of Columbia.
Harold Keats, Pennsylvania.
Minor Everet McChristie, Ohio.
Joseph McCormack, Pennsylvania.
James Lewis Moneyway, Alabama.
Kate Carroll Moore, District of Columbia.
(With distinction)
Katharine Mitchell Newbold, Maryland.
(With distinction)
Andrew Bryant Reavis, Tennessee.
Anna Lorette Rose, Pennsylvania.
Paul Vere Roundy, New York.
Dorothy Archibald Smallwood, District of Columbia.
Katherine Strong Summy, District of Columbia.
(With distinction)

Bachelor of Arts and Teacher's Diploma.

Louise Berry, District of Columbia.
Ellen Barksdale Bouldin, Virginia.
Hellen Gilliss, District of Columbia.
Estelle Annette Goodmin, District of Columbia.

Alice Elma Haslup, District of Columbia.
Helen Gertrude Rollins, Michigan.
Edward Wiest, Pennsylvania.

Teacher's Diploma.

Mary Ann Connelly, District of Columbia.
B.S., 1891, The George Washington University.
Helen Marie Evans, District of Columbia.
A.B., 1908, The George Washington University.

Bachelor of Science in Chemistry.

Ralph Wylie Frey, District of Columbia.
George Traver Harrington, Vermont.
B.S. in Agri., 1909, University of Vermont.
Elmer Stewart, District of Columbia.
George Pelham Walton, Indiana.

Bachelor of Science in Architecture.

Albert Lewis Harris, District of Columbia.

Bachelor of Science in Civil Engineering.

Howard Paul Bayly, District of Columbia.
William Shelton Gordon Dulin, District of Columbia.
Robert Horace Harrison, District of Columbia.
(With distinction)
Robert John Potbury, District of Columbia.
(With distinction)
Joseph Addison Preston Scott, Jr., District of Columbia.
John Daniel Stuwe, Minnesota.
Frank Veihmeyer, District of Columbia.

Bachelor of Science in Electrical Engineering.

Curtis Edgar McCalip, District of Columbia.
Howard Palmer Safford, District of Columbia.
(With distinction)

Bachelor of Science in Mechanical Engineering.

Hugh Gates Boutell, District of Columbia.
George Poole, District of Columbia.

Master of Diplomacy.

George Grauman Cohen, Indiana.
A.B., 1907, LL.B., 1907, University of Indiana.
Harold Barlow Quarton, Iowa.
Ph.B., 1908, Grinnell College.

Bachelor of Laws.

Charles Andersen, Texas.

Azro Lucien Barber, New York.
A.B., 1907, Syracuse University.

Clarence Leroy Bullion, Ohio.

Edward Richard Callister, Utah.

William Edward Davis, Maryland.
A.B., 1907, Western Maryland College.

Parker Van Patten Dodge, District of Columbia.
S.B., 1907, Massachusetts Institute of Technology.

Walter Grafton Dunlop, District of Columbia.
B.S., 1909, Princeton University.

Parke Ashby Galleher, District of Columbia.

Charles Carroll Glover, Jr., District of Columbia.
A.B., 1910, Yale University.

Spencer Gordon, District of Columbia.
(With distinction)
A.B., 1909, Princeton University.

Charles Vanderbilt Hilton, Maryland.

Joseph Raymond Hoover, District of Columbia.

William Cannon Houston, Jr., Tennessee.

Harris Monroe Humason, Connecticut.
A.B., 1909, Yale University.

Richard Washburn Hynson, District of Columbia.

John Louis Koeppler, Wisconsin.
(With distinction)

William Ers Lamb, District of Columbia.
B.S., 1909, Dartmouth College.

Clarence Albert Lindeman, California.

Horace Greeley Macfarland, District of Columbia.
(With distinction)
Graduate, 1891, United States Naval Academy.

Herman Miller, Nebraska.
(With distinction)
B.S., 1898, Nebraska Wesleyan University.

Richard Paul Momsen, Wisconsin.

Leigh Lanman Nettleton, Utah.

Matthew Waren Patterson, Arkansas.

Tom Scanlan, South Dakota.

Ernst Otto Schreiber, Jr., District of Columbia.
(With distinction)
A.B., 1910, The George Washington University.

Carl Dunkle Sheppard, Ohio.
Ph.B., 1902, Ohio University.

Jesse Bond Smith, District of Columbia.

St. Clair Smith, South Dakota.

Richard Franklin White, Louisiana.
A.B., 1910, Tulane University of Louisiana.

Bachelor of Law.

Walter William Burns, New York.
M.E., 1906, Cornell University.
Charles Arthur Denman, Nebraska.
Leon Clifton Guptill, Maine.
A.B., 1909, Colby College.
Douglas Granville Hudson, Kansas.
William Wallace Nairn, Jr., District of Columbia.
Maurice Palais, Massachusetts.

Doctor of Medicine.

William Otis Bailey, South Carolina.
Daniel Le Ray Borden, District of Columbia.
(With distinction)
Gilbert Roscoe Brewer, Illinois.
Sacks Bricker, District of Columbia.
William Henry Bricker, Jr., New Jersey.
Roy Edgar Burnett, Oklahoma.
B.S., 1905, Oklahoma Agricultural and Mechanical College.
George Wehnes Calver, District of Columbia.
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